# Division Intelligence Requirements for Sustained Peace Enforcement Operations

A Monograph
By
Major Kathleen A. Gavle
United States Army

School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

Second Term, AY 99-00

Approved for Public Release; Distribution is Unlimited

DTIC QUALITY INSPECTED 4

# SCHOOL OF ADVANCED MILITARY STUDIES MONOGRAPH APPROVAL

Major Kathleen A. Gavle

Title of Monograph: Division Intelligence Requirements for Sustained Peace Enforcement Operations

Approved by:	
COL Richard G. Kaiura, MSME	Monograph Director
Robert H. Berlin, Ph.D	Professor and Director, Academic Affairs, School of Advanced Military Studies
Philip I Brooks, Ph.D	Director, Graduate Degree Program

Accepted this th day of May 2000

#### **ABSTRACT**

DIVISION INTELLIGENCE REQUIREMENTS FOR SUSTAINED PEACE ENFORCEMENT OPERATIONS by MAJ Kathleen A. Gavle, USA, 66 pages.

In December 1995, the Dayton Peace Accords led to a US Army deployment to Bosnia for participation in a complex, multinational peace enforcement operation, Operation JOINT ENDEAVOR. Four heavy and one light divisions have served as the nucleus of Task Force Eagle, the US contingent of the Implementation Force (IFOR) and, later, the Stabilization Force (SFOR). This monograph examines the heavy division intelligence system in light of the experiences in Bosnia to assess its ability to support peace enforcement operations. It sets the stage for this examination by establishing the intelligence environment, identifying the differences between intelligence to support combat operations and intelligence to support sustained peace enforcement operations. It also addresses the specific intelligence requirements that resulted from the particular mission in Bosnia. With this background, the monograph examines the heavy division's intelligence system, assessing the utility of its equipment and its organization in peace enforcement operations. The result is an identification of the deficiencies in the division intelligence system and the required adaptation and augmentation for peace enforcement operations.

The heavy division intelligence system currently has all source capabilities, and the planned replacements for legacy systems promise greater capabilities in more efficient systems. Division equipment complements the force projection expectation of US Army forces, and Bosnia showcased the division level intelligence system's ability to employ the principles of split-based operations, broadcast intelligence, and tactical tailoring. Nevertheless, tactical MI continues to be plagued with inadequate legacy systems and with an inadequate HUMINT capability. Without significant augmentation, the tactical force is not organically equipped to provide the intelligence support required in peace enforcement operations.

The heavy divisions that served as the nucleus of TFE required considerable modification of and augmentation to their organic intelligence organizations, as well. The creation of several structures for collection, management, and analysis were the result of TFE's reliance on HUMINT and CI to satisfy its intelligence requirements. The peculiarities of the operation that required tracking peace accord provisions and making long-term assessments resulted in the creation of other structures within the division's Analysis and Control Element (ACE). To address the shortfalls in the heavy division's intelligence organization, TFE relied not only on internal restructuring, but also on considerable augmentation for manpower and for skills.

Intelligence in peace enforcement has the same basic requirement as intelligence in combat: to provide information the commander needs to make decisions. The specific requirements are much different, though, and the heavy division intelligence system, designed to support combat operations, lacks the necessary equipment and organization.

# TABLE OF CONTENTS

	Page
Introduction	1
I. The Intelligence Environment	4
II. Intelligence Equipment in the Heavy Division	12
III. Intelligence Organizations in the Heavy Division	.29
Conclusion	.38
Endnotes	.41
Ribliography	55

#### INTRODUCTION

Since the end of the Cold War, the United States Army's participation in stability and support operations (SASO) has dramatically increased. The collapse of communism, in particular, established an environment that spawned or rekindled many ethnic conflicts, in particular, thus creating an increased need for such operations.

Although there is much debate about the relevance of some of these operations to US interests and the value of US Army participation, globalization trends make it difficult for the US to ignore some of these conflicts. The National Security Strategy identified Bosnia, for example, as an important national interest based on its impact on global stability, the resulting refugee flow, and the brutal nature of the conflict. In some cases, US participation provides resources that the American military is uniquely qualified to provide, as well as leadership for additional international participation.

The US Army conducted several major SASO missions in the decade since the fall of the Berlin Wall, including operations in Somalia, Haiti, Bosnia, and Kosovo. In addition to training for combat, more and more units trained for or conducted operations involving humanitarian assistance, disaster relief, and peacekeeping. These non-combat operations have been more prevalent than the decade's combat operations that included the Gulf War, enforcement of the no-fly zone over Iraq, and air strikes on Serbia. They often posed significant resource challenges as the Army changed from its Cold War structure to a force projection Army structure to meet the demands of the operational environment. Regardless of the debate, then, the US Army should be prepared to conduct SASO.

Army intelligence is one dimension of the force that has been significantly challenged by the move away from the Cold War world. Army intelligence has generally been focused for the combat commander. Characteristics of Army intelligence during the Cold War included a threat-based doctrine and level of expertise, operations in a well-developed theater of operation, and intelligence that flowed from the bottom up. The Army used its battlefield experience—whether in war or at the maneuver training centers—to improve the timeliness and accuracy of tactical intelligence to commanders and adapted its tactical intelligence system to facilitate such improvement. As the Army changed from a forward deployed posture to one of force projection, Army intelligence also had to change. Force projection intelligence is mission-based, requires broad knowledge of multiple contingency areas, typically requires building forces and infrastructure over time, and needs intelligence to flow from higher echelons down to the commander on the ground.<sup>4</sup>

The past decade's numerous SASO missions demonstrated the Army's ability to employ its force projection capabilities. Operations JOINT ENDEAVOR, JOINT GUARD, and JOINT FORGE in Bosnia especially challenged these capabilities because of the complex environment, the poor infrastructure associated with the region, the multinational character of the operations, and the duration of the operation.<sup>5</sup>

This monograph examines heavy division level intelligence support to sustained peace enforcement operations in light of Operations JOINT ENDEAVOR, GUARD, and FORGE to assess whether existing division intelligence equipment and organization meet the demands of a peace enforcement operation. It begins by establishing the intelligence environment, identifying the differences between intelligence to support combat

operations and intelligence to support sustained peace enforcement operations. It also addresses the intelligence requirements that result, with particular attention to the challenges of intelligence in Bosnia. The primary intelligence tasks form the doctrinal baseline for this section and for subsequent examination of division collection and analysis operations.

Once the intelligence environment and requirements are established, the monograph examines the division level intelligence system, beginning with its equipment. It compares the equipment a division currently has to provide intelligence support to division operations with the requirements of the peace enforcement environment and identifies shortfalls. The divisions that served as Task Force Eagle (TFE) headquarters relied very little on their organic equipment to support their operations in Bosnia. Instead, they relied on considerable augmentation from other divisional units and from echelons above division (EAD) resources.

The next aspect of the division level intelligence system examined is the intelligence organization. This refers to the organization of the G2 and the divisional military intelligence battalion that supports the division. This section compares the current heavy division organization with the peace enforcement requirements and again, identifies shortfalls. Although the organization of each intelligence system depends largely on the personalities of the commander and his senior intelligence officer, TFE units created some intelligence structures that were particularly useful in the peace enforcement environment.

After nearly four years of conducting peace enforcement operations in Bosnia, there is no projected end date for the operation, and the National Command Authorities (NCA) have committed US Army forces to a similar, though smaller scale, operation in Kosovo. The solutions several Army divisions have used to compensate for deficiencies within the division intelligence system for peace enforcement provide lessons and models for future intelligence planners and force designers.

#### CHAPTER 1

#### THE INTELLIGENCE ENVIRONMENT

The issue of providing timely, accurate, and relevant intelligence support to tactical commanders—those at corps and below—is a timeless one for the Army. As General Patton's G2 in World War II, Brigadier General Oscar Koch sought creative ways to meet the intelligence demands of a dynamic and aggressive combat commander.6 Years before he became the J2, Military Assistance Command, Vietnam, Lieutenant Colonel Phillip B. Davidson coauthored a book entitled Intelligence is for the Commander, implying a responsibility with which intelligence professionals at all echelons have continually dealt. While there are several dimensions to this issue, a key one for the Army of the next several years is that of intelligence support to peace enforcement operations. Although war fighting is the primary focus of US Army forces and operations, the NCA has frequently called upon the Army to respond to other challenges in the dynamic and complex security environment of the post-Cold War world. In the foreseeable future, the US Army will remain engaged, responding across the spectrum of conflict and helping to shape the international security environment. Successful operations and intelligence support to those operations, then, require an understanding of the differences between the combat environment for which the Army

was structured and the peace enforcement environment in which the Army has recently operated.<sup>8</sup>

The combat environment generally assumes large formations and a linear deployment, much like the characteristics of Cold War era intelligence described above. Intelligence requirements for a heavy division in this environment involve detailed knowledge of the division's area of operations and area of interest in order to appreciate the effects of weather and terrain on both friendly and enemy courses of action. Other requirements include detailed knowledge of the enemy: his intentions and plans for attack, his disposition throughout the battlefield; the location of his major formations and key weapons systems. Once the division has located key enemy formations or systems, it must be able to track them and target them for destruction. Battle damage assessment helps the division assess the effectiveness of its operations and determine the remaining enemy combat strength. The six doctrinal intelligence tasks reflect these intelligence requirements: indications and warning (I&W), intelligence preparation of the battlefield (IPB), situation development, target development and support to targeting, force protection, and battle damage assessment.9 While these tasks are adaptable to any operational environment, in the combat environment, they assume predictable patterns of enemy forces. Enemy forces, furthermore, are the target of division operations, and there is a clear focus for the division's intelligence effort. A division typically looks at enemy battalions, assessing the capabilities, strengths, weaknesses, and vulnerabilities of their leadership and formations and determining potential courses of action. 10

US Army doctrine recognizes that the general SASO operational environment is distinct from the combat environment, particularly as SASO tends to occur in a complex

and ambiguous political-military context. Additionally, such an operation may require a long-term commitment of US Army forces and undergo several shifts of policy or emphasis. The Army's participation in these operations is typically joint and often multinational. Soldiers often work in conjunction with US and foreign governmental agencies and nongovernmental and other international organizations.<sup>11</sup>

Army doctrine also distinguishes three general categories of SASO: support to diplomacy, which consists of peace making, peace building, and preventive diplomacy; peacekeeping; and peace enforcement. US Army operations in Bosnia were, and continue to be, peace enforcement operations, characterized by the application or threat of military force to compel compliance with resolutions or sanctions. Consent and impartiality, which are essential elements of peacekeeping operations, are not absolute in peace enforcement operations. <sup>12</sup>

US Army's participation in the peace enforcement in Bosnia followed nearly four years of war and several unsuccessful attempts by the United Nations and European governments to resolve the conflict. During the summer of 1995, NATO air strikes and Bosnian Serb tactical losses shifted the balance of power and provided the opportunity for a viable ceasefire. Representatives for each of the former warring factions finally signed the Dayton Peace Accords on December 14, 1995 after weeks of negotiation, and the Implementation Force (IFOR) began its deployment for Operation JOINT ENDEAVOR.<sup>13</sup>

Bosnia serves as the case study for assessing heavy divisional intelligence operations in sustained peace enforcement operations. Operation JOINT ENDEAVOR was NATO's largest military operation to date. Since December 1995, five divisions

have served as headquarters for Task Force Eagle, the US Army contingent of the IFOR and subsequent Stabilization Force (SFOR), and all but one was a heavy division. IFOR and SFOR deployed under the provisions of Chapter VII of the United Nations Charter, which provides for peace enforcement operations, and sets the conditions for the intelligence environment under scrutiny.<sup>14</sup>

The intelligence environment in Bosnia has undergone considerable change over the past four years. It is possible to distinguish three general environments in order to examine the evolution of the intelligence requirements for the operation. The first environment was peaceful entry and encompasses the deployment and operations of IFOR. The second was peace sustainment, which existed from the beginning of SFOR through the middle of 10<sup>th</sup> Mountain Division's leadership of TFE in December 1999. The final environment was peace support and troop reduction, which began in late 1999 and continues into the spring of 2000. <sup>15</sup>

The peaceful entry environment epitomized many of the peace enforcement characteristics highlighted in US Army doctrine. The IPB required a detailed analysis of the terrain and weather impacts, particularly since Bosnia's infrastructure had suffered considerable war damage, and IFOR deployed across the Sava River in the winter. The IPB effort also required an emphasis on knowing the history, culture, demographics, political agendas, and attitudes and concerns of the population. In peace enforcement, there is no single enemy. In Bosnia, there were three former warring factions who were not enemies of the US forces, but they had agendas and attitudes towards the NATO mission and US forces. Additionally, there were many paramilitary groups and police forces that were detrimental to the peace process. It was important to understand the

impact each could have on IFOR's operations. Other threats confronting IFOR included poor roads and driving conditions, mines and unexploded ordnance, and the potential for rogue actor or terrorist attacks. Force protection was a major aspect of operations that required intelligence support. Finally, major players in Bosnia included the multinational brigades that served as part of SFOR and the multitude of nongovernmental and private voluntary organizations (NGO and PVO) that were working in Bosnia.

In addition to the overall operational environment that presented intelligence requirements to TFE, the Dayton Peace Accord established timelines for the parties' actions that IFOR had to monitor. Annex 1-A of the General Framework Agreement for Peace (GFAP) specifically identified military tasks for IFOR that included ending hostilities, separating the armed forces of the former warring parties, establishing and monitoring weapons storage sites, and overseeing the withdrawal of all foreign forces. In practice, soldiers conducted patrols, established checkpoints, removed illegal faction or police checkpoints, conducted weapons storage site inspections, and conducted base camp security and other force protection measures.

The TFE intelligence system, therefore, provided early warning, critical force protection information, and the compliance status with respect to weapons storage sites, cantonment areas, and refugee flows. Important databases were not just of the parties' military forces. License plates, mass graves, minefield data, and key personalities were important to many aspects of the TFE mission. Furthermore, the TFE intelligence system employed the principles of force projection intelligence, using broadcast intelligence, tactical tailoring, and split-based operations. It also worked in a NATO environment and had a need to share intelligence with NATO and non-NATO partners, while also

retaining a US-only capability.<sup>18</sup> TFE would find that remote collection assets had a role in Bosnia, but that contact with the people and with actors who worked in Bosnia's towns and villages provided a better understanding of local attitudes and issues.<sup>19</sup>

In the peace sustainment environment, the context of the operation began changing, with a resulting shift of focus at the division level. The military aspects of the Dayton Peace Accord had been largely accomplished within the year of IFOR's mandate. Progress was slow on the civil aspects of the agreement, however, which comprised ten of the eleven annexes of the agreement. Key failures included the lack of large-scale refugee returns, the lack of real freedom of movement, war criminals still at large, and the country still politically divided. Moreover, with their military forces largely constrained, the former warring factions devised other means to achieve their ends, and corruption became a concern in Bosnia's fledgling government and institutions. President Clinton announced in November 1996 that US troops would remain in Bosnia as late as June 1998 to facilitate progress on the civil aspects of Dayton.<sup>20</sup> TFE, which then became an element of SFOR, still conducted compliance inspections and prepared contingency plans to deal with major demonstrations, seizing belligerent radio towers, and detaining suspected indicted war criminals. More of TFE's attention and resources, though, were focused on the supporting tasks that provided a secure environment for agencies implementing the civil aspects to operate. TFE troops assisted the movement of organizations conducting humanitarian missions, observed and prevented interference with the resettlement process, monitored elections, and monitored the clearance of minefields.<sup>21</sup> Military operations helped restore order and provided a secure environment, and the intelligence requirement was to identify potential threats to that

order and security. By the time SFOR was operating in Bosnia, the main threats were "non-compliant military members, paramilitary, corrupt police, criminal elements, extremist groups, and political hardliners." The challenge for SFOR intelligence, in addition to monitoring compliance and supporting TFE contingency planning, was to identify the links that marked the parties' unconventional strategies to undermine the efforts of SFOR. This required an understanding of the political motivation behind most activity as well as the ability to identify personalities and linkages among various elements of the population, and again, human intelligence (HUMINT) resources proved most effective. <sup>23</sup>

In the peace support and troop reduction environment, the division's focus continued to be on those elements trying to undermine the peace process. TFE operated in a mature theater, and its goal was to foster a self-sufficient and effective Bosnian government capable of functioning in the absence of NATO's military forces. Stability had been achieved, but the operational environment was far more complex. Compliance was not a significant problem. The battalions at the outlying base camps still conducted weapons storage site inspections, but they inspected the sites less often, reflecting both more confidence in the Entities' Armed Forces (EAF) and the overall reduced manpower within SFOR. The battalions also conducted presence patrols and security tasks as before. The units reported the compliance results to TFE headquarters through their S2 to the Compliance Cell, which resided in the G2 or the Joint Military Commission (JMC), depending on which division led TFE. The police who had been instigators of problems were mostly under control. But the relationship among the police, the politicians, and the paramilitaries—the so-called "Anti-Dayton pyramid"—continued to evolve and develop

links among the criminal elements, making TFE's intelligence requirement one of political and criminal nuances. Events still seldom happened by chance, and many refugee returns, for example, had political motivations. Intelligence work resembled police work, and the key question for any analyst in approaching an issue was "why?"<sup>24</sup>

In this environment, the division was less concerned with compliance issues and more concerned with what TFE called anti-Dayton activity. The division focus was on preventing or stopping activity that would undermine progress towards accomplishment of all aspects—military and civil—of the Dayton Peace Accord. Examples of such activity included obstructing a planned resettlement or a violent reaction to the detention of an indicted war criminal. Additionally, the division tried to help battalions employ their smaller forces economically by anticipating areas of potential problems and focusing battalion efforts during weekly synchronization or targeting meetings. Other activities that warranted division level attention were major events like elections, resettlement operations, professionalization of the EAF, demilitarization of Brcko, review of contingency plans, and the restructuring of SFOR. Criminal and political linkages were typically of more intelligence interest than military compliance.<sup>25</sup>

Operations JOINT ENDEAVOR, GUARD, and FORGE illustrate how the operational and intelligence environments can evolve over the course of a sustained peace enforcement operation. It is critical that the divisions recognize the changes and adapt their intelligence system to effectively obtain the information that will support operations. This examination of the intelligence environment and its evolution provides the context now for a discussion of the division's intelligence system.

#### CHAPTER 2

## INTELLIGENCE EQUIPMENT IN THE HEAVY DIVISION

Evaluation of the Army's heavy division intelligence system proceeds, then, against the backdrop of the intelligence requirements for peace enforcement. The US Army's primary focus is war fighting, but it responds to much more, calling into question the adequacy of the force structure, especially its intelligence structure. The first aspect of the heavy division's intelligence system to examine is its equipment.

The current organization of division intelligence and the resulting organic equipment are the product of combat experience during the Cold War and two major intelligence studies. The intent of each restructuring initiative was ultimately to make the system responsive to the commander and to provide the best all source intelligence possible at the tactical level. The European scenario for major war with the Soviets was the primary driver for the Army's development of tactical intelligence equipment, yet the Army's Cold War combat experience was actually in Asia. New organizations and collection techniques developed during the Korean War marked the first real effort at tactical signals intelligence (SIGINT). Low-level voice intercept teams (LLVI), a valuable source of tactical intelligence during the Korean War, later became part of the division's organic collection and jamming companies. The Vietnam War accelerated the Army's transition to the Combat Electronic Warfare and Intelligence (CEWI) concept as a means of providing tailored reconnaissance, SIGINT, electronic warfare (EW), human intelligence (HUMINT), and counterintelligence (CI) capabilities. Following the war, the Intelligence Organization and Stationing Study (IOSS) resulted in the development of the CEWI battalion, the basis of the divisional military intelligence (MI) battalion for the

1980s. Experimentation with the 552 Military Intelligence (MI) Battalion at Fort Hood began in 1976, and the CEWI concept became final in 1979. It was by no means a perfect solution—many units tailored their operations within this tailored organization—but it put a premium on providing intelligence to the war fighter.<sup>26</sup>

At the beginning of the 1990s, the vision of the Army's MI Corps as Lieutenant General Charles Eichelberger, former Deputy Chief of Staff for Intelligence, saw it included more targeting and fewer but more capable systems at the division.<sup>27</sup> The trends of the 1990s—a changed threat environment and budget constraints that made reduction, integration, and cooperation necessary—forced an assessment of Army intelligence.<sup>28</sup> The MI Relook study that followed DESERT STORM almost brought an end to CEWI. Organized in May 1991, the study's participants had the mission of examining the intelligence and electronic warfare (IEW) battlefield operating system (BOS) and making recommendations to improve support to combat commanders. Among the issues were the inadequacy of Army communications systems and the need to refocus and balance the IEW BOS across echelons.<sup>29</sup> Although the MI battalion is no longer called a CEWI battalion and its organization has changed to accommodate projected capabilities, in reality, most divisional MI battalions have the same basic collection capabilities that came with CEWI.

This evolution of the Army's intelligence structure coincided with its transformation to a force projection Army. There are several principles of force projection intelligence that are relevant for intelligence across the spectrum, including combat and peace enforcement. The commander drives intelligence to focus the effort and maximize scarce resources. Intelligence synchronization ensures all intelligence

resources are integrated to satisfy the requirements of the operational environment. Split-based operations send a small, rapidly deployable unit forward that can plug into several echelons of intelligence and pull intelligence from an established support base. Tactical tailoring deploys tiered, modular packages to balance the intelligence team with the right capabilities. The Deployable Intelligence Support System (DISE), which responds to the principles of split-based operations and tactical tailoring, often includes non-organic augmentation resources. A final principle of force projection intelligence is broadcast intelligence, which pushes products to multiple echelons simultaneously. Force projection requirements have impacted the development of tactical intelligence capabilities, giving the division intelligence system considerable flexibility. The division intelligence system designed to succeed in war fighting, however, is not ideally suited to support peace enforcement.

Within the division intelligence system, there are three categories of intelligence equipment that make up the division's intelligence architecture: collectors or sensors, processors, and communications systems. These systems are resident in the division's organic military intelligence (MI) battalion and in its Analysis and Control Element (ACE). Collectors obtain the raw data that supports answering a commander's intelligence requirements, while processors and communications systems turn that data into usable intelligence and then transmit it to the commander or another user. This is a simplistic description of these systems, but with the proliferation of computer boxes and various trucks and vans at all echelons, it helps to distinguish them by their functions.<sup>31</sup>

Most of the division's key collection assets are in its MI battalion. The heavy division's MI battalion has the capability of providing surveillance, communications

intercept and direction finding (DF), electronic attack, counterintelligence, and interrogation support to the division with its organic assets. The MI battalion currently has ground surveillance radars (GSR) (AN/PPS-5) to provide surveillance, and interrogators and CI personnel to conduct most human intelligence (HUMINT) work. Ground-based systems for intercept and direct finding include the AN/TRQ-32A(V)2 (Teammate), AN/PRD-12, AN/TSQ-138 (Trailblazer). The AN/TLQ-17A(V)3 (Trafficjam) conducts intercept and electronic attack (EA). The division's Quickfix (AN/ALQ-151(V)1) platoon—organic to the Aviation Brigade but OPCON to the MI battalion—conducts airborne intercept, direction finding, and electronic attack. Doctrinal manuals published in the mid to late 1990s indicate that the MI battalion has unmanned aerial vehicles (UAV) and Ground-based Common Sensor (GBCS) instead of the GSR and four separate SIGINT systems. A tactical UAV has not yet been fielded across the heavy divisions, and the GBCS program was cancelled. Prophet is the new program that will replace the legacy ground-based intercept, DF, and EA systems, as well as the Advanced Quickfix.<sup>32</sup>

The foundation of the division's intelligence processing and analysis effort is the All Source Analysis System (ASAS). It is the intelligence component of the Army's Tactical Command and Control System (ATCCS). The ACE has other systems that give analysts access to broadcast intelligence and to theater and national databases which ASAS was not initially designed to receive. The Ground Station Module (GSM) or Common Ground Station (CGS) receives Joint Surveillance Target Attack Radar (JSTARS) and UAV imagery. The Commander's Tactical Terminal (CTT) or Joint Tactical Terminal (JTT) provides access to EAD SIGINT. The Mobile Integrated

Tactical Terminal (MITT) enables the division to receive digital imagery, electronic intelligence (ELINT), and SIGINT from EAD assets. These systems are processors; they receive, convert, and correlate information into usable combat information or intelligence. A key element of the division's intelligence architecture is the Trojan Special Purpose Integrated Remote Intelligence Terminal (Trojan SPIRIT), a satellite terminal that provides intelligence processing and dissemination via secure voice, facsimile, and data. Another communications system that is unique to the intelligence system is the Tactical Intelligence Gathering and Exploitation Relay (TIGER). It provides an important link at the division and brigade level between sensors, processors, and commanders.<sup>34</sup>

The previous chapter explained how intelligence requirements for peace enforcement differ from those for combat. The challenge to the divisions deploying to Bosnia was to make their combat-oriented intelligence systems responsive to the demands of that particular peace enforcement environment. That would not be an easy task; much the equipment described above was not useful for IFOR or SFOR, but the divisions lacked the equipment that would prove valuable. Army intelligence is well equipped to sense and target linear structures and formations, but not so well equipped to conduct peace enforcement operations; the capabilities do not match the threat. The conduct peace enforcement operations are capabilities do not match the threat. The conduct peace enforcement operations are capabilities do not match the threat. The conduct peace on the conduct peace enforcement operations, and FORGE demonstrated TFE's reliance on the chnology for processing, dissemination, and reach back capabilities.

The division's organic SIGINT platforms were not useful in Bosnia for several reasons. First and foremost, the critical targets were not within the VHF range that the

organic systems are capable of obtaining. Other challenges for tactical SIGINT included the good communications security (COMSEC) the former Yugoslav forces exercised, the shortage of military Serbo-Croatian linguists, and the terrain and weather of the region.<sup>36</sup> One method TFE used for tactical SIGINT was to put an AR8000, similar to a bearcat scanner, on the Quickfix helicopter. Patrols, convoys, inspection teams, and force protection teams also used this portable scanner.<sup>37</sup> The National Security Agency (NSA) provided "purpose-built" systems—much like off-the-shelf frequency scanners—to conduct SIGINT, and TFE manned some of the positions with its intercept operators. Although it provided some indications and warning intelligence and some near-real-time situation development, SIGINT was not a major contributor to TFE intelligence.<sup>38</sup>

Measurement and signature intelligence (MASINT) also had limited utility for the division; it was most effective at the battalion task force level for surveillance operations. Units used the GSR for early warning and force protection around the base camps and to monitor intersections, cantonment areas, and other named areas of interest (NAI). <sup>39</sup>

During 1<sup>st</sup> Armor Division's second rotation as TFE Headquarters, its MI battalion received an experimental Vehicle Mast Mounted Sensor System (VMMSS) to use during Operation JOINT FORGE. Mounted to the back of a high mobility multi-purpose wheeled vehicle (HMMWV), it had a black and white video camera, and Forward Looking Infrared (FLIR) camera, and range finder. Camps Dobol and McGovern and Comanche Base had the systems. The unit specifically planned to use the VMMSS to detect instigators in the middle of a crowd and to document incidents without sending troops into a hostile situation. <sup>40</sup>

Another MASINT system that was somewhat useful in Bosnia was the Remotely Monitored Battlefield Sensor System (REMBASS). This system, however, is not organic to heavy divisions; it is organic to light, air assault, and airborne divisions. USAREUR received a loan of REMBASS for use in Bosnia, and teams from these divisions deployed to Bosnia to support TFE with REMBASS and Improved REMBASS (IREMBASS) systems. Battalions used REMBASS for force protection and base camp security; there was a short-term problem of theft of supplies from the base camps. REMBASS also monitored resettlement or remote areas for suspicious activity and tracked the movement of displaced persons. Teams had to use creative sensor arrays to ensure they could distinguish personnel from vehicles in the restricted terrain. They also had to contend with minefields as they emplaced sensors, which led to collaboration with the engineers. The results of REMBASS collection were not immediate, but over time, the system helped analysts develop trends and recognize unusual activity. 42

Of the technical intelligence disciplines, imagery intelligence (IMINT) was the most valuable to TFE's peace enforcement mission. It provided intelligence to support monitoring compliance with the Dayton Peace Accord, local I&W, and situation development. It also had a history of presence in the Balkans, which proved valuable to TFE's IPB. The focus of early IMINT in Bosnia was the Bosnian Serb integrated air defense system (IADS) as NATO enforced a no-fly zone. During Operation DELIBERATE FORCE, the NATO bombing campaign, IMINT provided targeting for precision-guided munitions.<sup>43</sup> The systems that proved most useful in satisfying TFE intelligence requirements, however, were not available through the standard heavy division intelligence system.

JSTARS is an EAD asset that divisions can expect to access during combat operations, so it was not unreasonable to expect its participation in a major peace enforcement operation. Its employment in the peace enforcement environment yielded mixed results, at best. General George A. Joulwan, Supreme Allied Commander Europe (SACEUR) during IFOR's operation, considered JSTARS one of his critical tools for monitoring compliance with the Dayton Peace Accords. He planned to use its imaging capabilities to provide tangible evidence of noncompliance and impress upon faction leaders the fact that NATO was constantly watching them. <sup>44</sup> JSTARS deployed to Bosnia to support Operation JOINT ENDEAVOR during IFOR's deployment and redeployment; it was operational from late December 1995 through March 1996 and again in November 1996. Once it left the theater, it did not go back to support the subsequent missions of SFOR. Two GSMs were at the Intermediate Staging Base (ISB) in Hungary and four others were deployed throughout IFOR's area of operations. <sup>45</sup>

With its ability to detect and track major unit movements, JSTARS was supposed to provide I&W of threats to IFOR troop deployments, as well as monitor the zone of separation (ZOS). There were several challenges to its employment in Bosnia. For one thing, the threat that JSTARS can readily detect—major moving formations—was not the most likely threat in Bosnia, where mines, hazardous roads, and snipers were among the initial concerns. When the former warring factions (FWF) did move, they did not use large, definitive formations that JSTARS could detect. The mountainous terrain created a lot of radar shadowing, a problem equivalent to terrain masking for visual systems, that degraded JSTARS' productivity. Civilian traffic shared the roads that military traffic

used, creating an overwhelming number of moving target indicators (MTI) that JSTARS could not distinguish as militarily significant.<sup>46</sup>

IFOR did derive some benefits from JSTARS, though. The lack of major FWF movement detectable by JSTARS served a valuable I&W and compliance verification purpose. It effectively monitored compliance at weapons storage sites and cantonment locations and movement around towns and suspected mass gravesites. JSTARS' ability to record and replay MTI history made it useful in establishing ground and air traffic patterns over time. This assisted TFE to some extent in monitoring FWF helicopter traffic and in assessing progress on freedom of movement.<sup>47</sup>

The UAV is a system long projected to be at the division level, but still not realized. It is available, though not widely, at echelons above division and in the Marine Corps. Predator UAV began flying to support operations in Bosnia in July 1995, operating out of Albania. The early payloads—the systems were still under a Department of Defense Advanced Concept Technology Demonstration (DOD ACTD) program and did not represent fielded systems—were not capable of live video transmission or cloud penetration. By August, two additional vehicles deployed to the theater, both equipped with the Ku-band data link that made the transmission of near-real time video imagery possible. The Pioneer UAV deployed to Bosnia during the summer of 1996 and was OPCON to TFE, but it redeployed in November after a series of problems and crashes.

The UAV proved valuable for compliance verification and for situation development. Before IFOR deployed to Bosnia, the UAV monitored the withdrawal of Serb heavy weapons from the exclusion zone around Sarajevo.<sup>50</sup> For TFE, it provided images of lines of communication, key bridges, and weapons storage sites. As EAF

compliance became more routine, the UAV provided useful intelligence to support other TFE efforts to provide a safe and secure environment as part of SFOR. The UAV monitored activity around election polling stations and government buildings when elections and intra-entity strife were among the more serious threats to the secure environment. During demonstrations or incidents, it could assist TFE leadership in identifying those who were perpetrating such incidents plus conducting other illegal activity in the ZOS. When the UAV loitered to monitor such incidents, it became more of an operational resource than an intelligence asset, enabling commanders to literally watch events unfolding while maintaining troops at a distance. TFE did not retain continuous UAV coverage through all SFOR rotations. Bad weather prevented the use of the UAV during much of the winter, and then, as a low-density high-demand asset, it deployed to Kosovo. S2

Some of TFE's most effective imagery did not come from high-tech, high-cost systems, but from non-traditional sources of imagery. The AH-64 gun camera tapes and OH-58D cockpit tapes covered many intelligence requirements for IFOR and SFOR. Combat camera crews were augmentees to TFE, and their work went well beyond recording the unit's history or providing command information. Combat camera footage documented weapons storage site inspections, meetings with faction or local leaders, and TFE patrols. Hand-held digital cameras, though not organic to division units, were available throughout the battalion task forces by MI and non-MI soldiers for imagery of key sites, personalities, inspections, and patrol activity. TFE even used the MITT to downlink aviation gun cameras and exploit and produce imagery products. This type of imagery provided relevant, responsive, and timely intelligence to commanders.<sup>53</sup>

HUMINT and CI—the first is an intelligence discipline, the second is a multi-discipline function—were intertwined and invaluable in Bosnia. Experience and doctrine recognize that a peace enforcement environment is HUMINT intensive and that HUMINT is often the best source of intelligence for understanding the history, culture, infrastructure, leadership, and sense of the population. In his 1993 monograph, Major Jonathan B. Hunter concluded that the American experience in Somalia echoed the value of HUMINT that operations in Lebanon and Northern Ireland had previously established. Lieutenant Colonel David D. Perkins, who served as the G2X for TFE during Operation JOINT ENDEAVOR, explained that long before IFOR's deployment, HUMINT and CI teams were gaining experience and developing tactics, techniques, and procedures in operations in Somalia, Croatia, Macedonia, Rwanda, and Haiti. Clearly they make a major contribution to SASO. Army HUMINT, however, atrophied in the decades after the Vietnam War, and Army tactical HUMINT remains a limited capability, requiring augmentation of personnel, transportation, and communications equipment.

HUMINT and CI teams in Bosnia responded to force protection requirements and to enforcement of the Dayton Peace Accord requirements. As operations continued, they provided intelligence to support TFE's efforts to maintain a secure environment for civilian agency operations. These teams provided counterintelligence collection, vulnerability assessments of TFE base camps, liaison with local law enforcement officials and foreign military security and intelligence services, CI Force Protection Source Operations (CFSO) debriefings of soldiers, screening of refugees and local national employees, route reconnaissance. They also used hand-held digital cameras to support their work and provide timely imagery to commanders on the ground. <sup>56</sup>

Intelligence personnel are not the only sources of HUMINT in a peace enforcement operation. By the nature of their mission to interact with the local population and many of the international agencies in country, civil affairs (CA) soldiers were good sources of information for compliance and security requirements. The peace enforcement environment is inherently political, and the division's political advisor (POLAD)—not a standard division resource—offered invaluable insights from his unique ability to liaise with outside organizations that included NATO ambassadors, Bosnian leaders, allied defense representatives, and US Congressional and Department of State members.<sup>57</sup> When IFOR first deployed, an extremely valuable source were the Joint Commission Officers (JCO). British soldiers served as JCOs under the UN Protection Force (UNPROFOR) and were familiar with the area and with local leaders and people. They passed on invaluable information to IFOR commanders. American Special Forces soldiers eventually replaced the British JCOs and continued to be valuable resources for SFOR and, through division level liaison officers, TFE. These soldiers were not restricted to base camps; they lived in outlying towns and routinely interacted with local people, gaining their trust and establishing credibility. Consequently, their sense of local attitudes and in-depth knowledge of local infrastructures was generally much better than that of the average soldier.<sup>58</sup>

Every soldier, though, has a role in the collection process, and every contact made can be useful. Convoys, truck drivers, military police, and soldiers on patrol, at checkpoints, and conducting weapons storage site inspections provided mandatory compliance information but also their impressions about local attitudes and indications of trouble. As compliance became the norm and maintenance of a secure environment took

precedence, soldier interaction with other agencies became increasingly important. A characteristic of a peace enforcement environment is that there are a multitude of nongovernmental organizations (NGO), private voluntary organizations (PVO), and other international agencies working in the region. Because they are constantly working among the general population, they have considerable knowledge of local attitudes, personalities, infrastructures, and issues. Such organizations in Bosnia included the Organization for Security and Cooperation in Europe (OSCE), the UN High Commissioner for Refugees (UNHCR), and the International Police Task Force (IPTF). US soldiers often had contact with these organizations, since they dealt with elections and arms control, resettlement, and police supervision and training, respectively. Although it was not appropriate for the collection manager to task these organizations to provide intelligence for TFE, the rapport TFE soldiers established with them often produced useful information.<sup>59</sup> Intelligence collection by battalion level soldiers was generally not as well coordinated as that of the CI and HUMINT teams, but S2s did improve over time in their ability to provide specific collection guidance for their soldiers. Furthermore, while some of the reports of the CI and HUMINT teams seemed too canned, those of the average soldier or those resulting from unit bi-lateral meetings were typically very useful.60

In his paper on intelligence requirements for operations other than war, Lieutenant Colonel Jeffrey Rapp, the G2 for 1<sup>st</sup> Infantry Division's leadership of TFE, wrote that the bulk of intelligence to support operations in Bosnia were from human sources. He provided two situations that illustrated the importance of HUMINT and the relative insignificance of technical intelligence. The first situation dealt with compliance with the

Brcko provisions. Indicators of noncompliance included sightings of young men in paramilitary uniforms and increased requests by one of the factions for training. The assets that could identify those indicators were human sources, such as patrols and liaison officers. The second situation dealt with displaced persons and refugees (DPRE) returning to their former homes. Returns or resettlement became a major focus for TFE. It involved several aspects of the Dayton Peace Accord, including freedom of movement and the right to return. Violence often accompanied returns, and TFE ultimately identified "hot spots" that were most prone to violence. Indicators of potential hot spots included the wartime history of the area, current demographics, and local attitudes. The best way to obtain such information was not through technical means, but through human contact. Because of their contact with the local leadership and population, organizations such as the IPTF and the UNHCR often provided good information about potential return sites. <sup>61</sup>

Open source intelligence, also known as OSINT, is not yet a doctrinally sound term as an independent discipline, but it was a valuable tool in Bosnia. Exploitation of open source information has always been part of the all source intelligence picture, complementing secretive collection methods. Examples of useful sources include UN and World Bank reports, think tank research papers, the CIA's World Fact Book, scholarly articles, and the Janes' series of defense and intelligence products. The advantage to this type of intelligence is that it can provide a good gauge of the political, social, and cultural dynamics of a society, in addition to indicating local attitudes. In force projection operations, open source information can rapidly provide key political, economic, and military information about the operational environment. The disadvantage

of OSINT is that it can be manipulated either by those providing the media report or by those translating it. It is also subject to errors and biased perspectives, which may not be intentional but will still impact the quality of information. Intelligence analysts must consider the reports carefully to avoid becoming a medium for misinformation or propaganda. 62

During Operation JOINT ENDEAVOR, the 165th MI Battalion began publishing the Night Owl, a daily OSINT product that gave TFE insights into local attitudes and concerns. By Operation JOINT GUARD, the OSINT section received specific reporting guidance from the G2 so that their collection and translation efforts complemented TFE operations. News items that warranted reporting for TFE included political events; public elections; organized demonstrations or protests; proposed gatherings of government or independent organizations such as the Women of Srebrenica; and statements about SFOR, Brcko, or war criminals. TFE established a section dedicated to OSINT, consisting of local national translators who listened to several radio stations, read various local publications, then translated key programs or articles. Eventually, TFE sent teams to outlying camps to gain better access to the local media in critical areas like Brcko and Doboj. The OSINT section and outlying teams were ad hoc organizations that required personnel augmentation. Their equipment requirements—televisions, VCRs, radios, computers, and printers—also exceeded division organic resources. Despite the ad hoc nature of these collectors, they were very successful. The Night Owl reports were a key measure of local attitudes, provided I&W of increasing tensions, and cued other collection assets. The Night Owl also served a battle damage assessment role, providing reactions to SFOR operations, including information operations.<sup>63</sup>

In addition to collection systems, TFE needed processing and communications systems above what the heavy division intelligence system has. One after action report from Operation JOINT ENDEAVOR specifically commented on the proliferation of intelligence systems at division and below. The proliferation was necessary because there was no single system to move intelligence from the strategic to tactical level, because TFE was a multinational division, and because the number and type of TFE collection systems exceeded those of the standard heavy division. There were security challenges; some of the units within the American sector were NATO partners, and some were not, but they all had similar intelligence requirements. The Linked Operations-Intelligence Centers-Europe (LOCE) network connected TFE with the other multinational divisions (MND) and with IFOR/SFOR headquarters, but TFE had to provide intelligence liaison teams to its subordinate multinational brigades or battle groups. This required taking soldiers and ASAS-compatible equipment out of hide or receiving augmentation from other MI units.

IFOR's deployment prompted an early fielding of upgraded ASAS and saw the deployment of developmental or prototype systems. The Joint Broadcast System (JBS), for example, gave battalion S2s access to theater and higher IMINT. A significant development was the automation support to HUMINT and CI operations. US Army Europe (USAREUR) began developing the Theater Rapid Response Intelligence Package (TRRIP) during operations in Somalia, when it was clear that CI and HUMINT would become major players in future contingency operations and that an automation tool with access to the overall intelligence architecture was necessary. TRRIP was a laptop computer that provided HUMINT and CI teams access to theater and national level

databases and expertise and facilitated reporting down to tactical commanders and up to theater and national consumers. <sup>66</sup>

The CI/HUMINT Automated Tool Set (CHATS) is the replacement for TRRIP, designed to standardize reporting and databases and enable CI and HUMINT teams to interface with ASAS. CHATS is one of four devices to improve CI and HUMINT integration with ASAS. Generally based on USAREUR's TRRIP, it is a commercial laptop with message formats, digital camera, printer, scanner, secure telephone, and communications interfaces. It continues to undergo development and fielding.<sup>67</sup>

The heavy division intelligence system currently has all source capabilities, and the planned replacements for legacy systems promise greater capabilities in more efficient systems. The equipment complements the force projection expectation of US Army forces. Nevertheless, the heavy division, even when the legacy systems are replaced, still has shortfalls for a sustained peace enforcement operation. "The Army intelligence system was organized and resourced for sensor-to-shooter targeting with go-to-war, mobile, tactical assets." In Bosnia, the division's organic SIGINT was largely ineffective, and higher-level SIGINT was either not releasable or not timely for TFE. The more useful MASINT system, the REMBASS or IREMBASS, did not exist in the heavy division. Traditional IMINT was the more productive of the technical intelligence disciplines, but nontraditional sources of imagery served TFE better and more efficiently. HUMINT was the lead collector in theater, but there were not nearly enough HUMINT and CI assets at the division level. OSINT was a productive discipline resourced completely in an ad hoc manner. Finally, the requirement to share intelligence with NATO and non-NATO partners required additional equipment. Without significant

augmentation, the tactical force is not organically resourced to provide the intelligence support required in peace enforcement operations.<sup>69</sup>

#### **CHAPTER 3**

### INTELLIGENCE ORGANIZATIONS IN THE HEAVY DIVISION

The second aspect of the heavy division intelligence system to evaluate is its organization. As described in the last chapter, the current organization of heavy division intelligence owes its existence to the Cold War, subsequent experiences of combat, and the restructuring from a forward deployed to a force projection Army.

The heavy division's military intelligence (MI) battalion consists of five companies: a headquarters and headquarters company, three direct support companies, and one general support company. The general support company contains the division's ground-based SIGINT assets. Each direct support company has an Analysis and Control Team (ACT) that typically collocates with the supported brigade tactical operations center (TOC). The MI company commander directs the ACT's processing, analysis and dissemination of intelligence to the brigade S2. Additionally, the commander conducts asset management and reporting of subordinate collectors through the ACT. The ACT has an ASAS workstation that enables the analysts to access databases and products from the division's Analysis and Control Element (ACE).

The ACE is a major component of the division intelligence system. Though assigned to the MI battalion's Headquarters, Headquarters and Operations Company, it is OPCON to the G2. It conducts a multitude of functions for the division, including

collection management, producing and disseminating all source intelligence products, producing and disseminating targeting data, providing intelligence and electronic warfare (IEW) control, and supporting battle command and planning.<sup>71</sup> In conducting these operations, the ACE relies heavily on the ASAS described previously.

There is no "right" way to organize the ACE; it must serve the needs of the commander for the intelligence environment in which the division operates. FM 71-100, Division Operations, describes the ACE as having three sections: all source intelligence synchronization, single-source analysis, and planning and coordination. FM 34-25-3, All Source Analysis System and the Analysis and Control Element, describes the ACE as having an all source intelligence section (ASIS), a technical control and processing section (TC&P), and a headquarters section. The ASIS is responsible for the intelligence functions of IPB, situation development, target development, collection management, battle damage assessment, and force protection. The MITT and GSM or CGS teams reside in this section. The TC&P section, meanwhile, has three single source analysis teams—SIGINT, HUMINT and CI, and IMINT—that conduct processing, analysis, reporting, and production by intelligence discipline. The headquarters section manages current and future operations and ACE logistics. The typical organization of the ACE for combat takes advantage of the workstations and software capabilities resident in the ASAS, which include database, situation development, targeting, collection management, single source workstations, all source workstations, and system supervisor.<sup>73</sup>

For force projection operations, the ACE Chief can configure the components of the ACE to provide uninterrupted intelligence support to operations from predeployment through redeployment. The ACE conducts split-based operations, if necessary, by

deploying a Deployable Intelligence Support Element (DISE) and maintaining an intelligence support base. The DISE is the forward element of the ACE and it deploys with essential communications, processing, and broadcast downlink systems to pull information from its support base and to support an initial entry force. The intelligence support base gives the commander access to his peacetime sources to complement the support of theater resources. Additionally, the ACE usually receives a National Intelligence Support Team (NIST) to support force projection operations. This is a team comprised of representatives from national agencies with reach back communications capability. The team relies on the Joint Deployable Intelligence Support System (JDISS) terminal and dedicated, secure communications to access national level resources for expertise or to focus collection. Operation JOINT ENDEAVOR was the first deployment of a NIST down to division level; it was effective in the peace enforcement environment and should be a part of similar operations in the future.

As in the case of the division's intelligence equipment, TFE had to adapt its intelligence organizations to serve effectively in the peace enforcement environment in Bosnia. The divisional MI battalion did some adapting to improve its collection operations, but the ACE did most of the adapting in order to satisfy the intelligence management, analysis, and production requirements. Augmentation was again crucial for each division that led TFE.

The initial deployment of divisional MI battalion assets was by function, but subsequent deployments were in accordance with the concept of direct support. Direct support assets included the ACT, the GSS team, and the Force Protection Teams (FPT). The companies did not have the UAV or the GSM or CGS; these items have not yet been

fielded to the direct support companies. Since the division's ground-based SIGINT assets did not deploy, some of the MI battalion's intercept operators manned the "purpose-built" systems. Otherwise, the general support company did not deploy.<sup>77</sup>

The previous chapter showed that HUMINT was the most effective collector for TFE operations in Bosnia. The current heavy division organization, however, does not reflect the structures necessary to manage or conduct HUMINT and CI operations in a peace enforcement environment. TFE created Force Protection Teams (FPT) from its CI and interrogation assets. The FPT was a four-person team deployed in direct support of battalion task forces and in general support to TFE. Since the divisions generally lacked linguists proficient enough to support the FPT, a contracted or locally hired translator usually augmented the teams. It was an atypical organization of collectors, but it proved effective. Additional teams deployed to support TFE operations during the September 1996 elections and eventually to support units of the Nordic-Polish Brigade. The division's MI battalion did not have enough of these teams to fully support TFE requirements, either. TFE employed as many HUMINT and CI assets as a corps normally would. The divisional MI battalions provided Operational Control Elements (OCE) to direct and supervise the operations of the Force Protection Teams (FPT) at the battalions. The OCE was not a doctrinal structure, but it had a precedent in CI doctrine.

Emerging doctrine for IEW support to stability and support operations builds on the experiences in Bosnia. It further develops the concept of tactical tailoring of HUMINT and CI assets by including among planning factors the linguistic skills and specific technical qualifications necessary for each mission. It also creates a HUMINT Control Team (HCT) at every echelon to do what the OCE did. This team is responsible

for mission and technical management of organic and attached HUMINT teams, for coordination with the S2/G2 and the ACT/ACE for threat information and intelligence requirements, and for educating the supported commander on HUMINT collection capabilities.<sup>80</sup>

TFE's ACE established organizations to facilitate HUMINT and CI operations, as well. The HUMINT Analysis Cell (HAC) replaced the Multi-discipline

Counterintelligence (MDCI) section of the ACE and became the model for operations in Kosovo as a result of experience in Bosnia. TFE established the HAC in response to the volume of reporting that quickly overwhelmed the assigned analytical capability within the ACE and to the fragmented effort between the Division Main and the Division Rear. This resulted in inconsistent integration of CI and HUMINT reports into an all source product and occasionally led to duplicate reporting. The division's ACE needed augmentation to provide adequate analysis for twenty-four hour operations. The Division Rear Command Post HAC ultimately moved to the Division Main Command Post in Tuzla, which, when coupled with augmentation from the 165th MI Battalion and other soldiers on temporary change of station (TCS) orders, significantly improved the analysis and integration. Sec. 1997.

The G2X, the CI and HUMINT Mission Manager, was a critical organization for TFE intelligence operations. The G2X concept does not yet appear in US Army intelligence doctrine. It is, however, part of the new and emerging doctrine that the US Army Intelligence Center and School at Fort Huachuca, Arizona is exploring, along with the concept of the S2X to support the Interim Brigade. In an interview for the US Army Center of Military History, Lieutenant General Paul Menoher, former Army Deputy

Chief of Staff for Intelligence (DCSINT) said that the G2X was first used in Somalia and then again in Haiti. He felt that because there were multiple agencies and echelons of HUMINT in Bosnia, the G2X would again be necessary to coordinate Army collectors with the Defense HUMINT Service, the Air Force, and other agencies. LTG Menoher sent a lieutenant colonel from his staff to serve as the G2X, which he called a new doctrinal position.<sup>84</sup>

Lieutenant Colonel David D. Perkins served as TFE's G2X. In his report on CI and HUMINT for the Center for Army Lessons Learned, LTC Perkins discussed the evolution of tactical CI and HUMINT operations in support of SASO throughout the 1990s and the benefits of this experience for TFE. The G2X, derived from joint doctrine, was critical for successful CI and HUMINT operations. At TFE Headquarters, the G2X comprised an Army G2X, an Army TF Counterintelligence Coordinating Authority (TFCICA), a Defense HUMINT Service (DHS) section, a national agency liaison officer, and Air Force, Navy, and Marine Corps personnel. The G2X did not conduct operations; it was the staff element responsible for coordinating, deconflicting, and synchronizing the entire CI and HUMINT effort within TFE's sector. CI and HUMINT assets included the Army tactical teams, DHS resources, Joint Commission Officers (JCO) from Army Special Forces, the Allied MI Battalion (AMIB), and other multinational and DOD assets. The G2X assisted the collection manager by ensuring the CI and HUMINT effort complemented the overall collection plan, cuing other assets or verifying information from other disciplines. This dedicated, multi-echelon CI and HUMINT capability far exceeded the typical heavy division capability, yet it was, and continues to be, essential to operations in Bosnia.85

An organization TFE created that was unique to Operations JOINT ENDEAVOR, GUARD, and FORGE was the Compliance Cell, established to oversee the parties' compliance with the provisions of the Dayton Peace Accord. IFOR's primary military tasks were to separate the FWF and ensure that they put all of their military equipment and units in designated weapons storage sites and cantonment areas no later than April 17, 1996. IFOR units conducted verification inspections to inventory FWF weapons and equipment, and TFE headquarters tracked the results for each site. This required organization of a database to manage the information and to pass on to the SFOR units who followed. The Compliance Cell also processed the FWF requests for military movement and training. As compliance became the norm for the Entities' Armed Forces (EAF)—SFOR's redesignation for the FWF—the Commander, SFOR (COMSFOR) issued Instructions to the Parties (ITP) that reflected increased trust and confidence. These guidelines were also for the Compliance Cell's use. For most of the divisions who led TFE, the Compliance Cell was a section of the G2. One division passed its function and resources to the Joint Military Commission (JMC), although it continued to coordinate and share information with the G2.86

The ACE modified the internal organization of its analysts, as well. Part way through his tour as the G2 for 1<sup>st</sup> Infantry Division in Bosnia, Lieutenant Colonel Jeffrey Rapp established long-term and short-term analysis cells. Subsequent divisions retained this division of labor in addition to their all source or fusion sections. The intent was to provide some focus for the analysts.<sup>87</sup> TFE needed intelligence to support its routine operations, contingency plans, and near term operations. It also needed to be able to look ahead at the next elections, at the Brcko decision, and at resettlement in the spring and to

provide products to support planning for those events. The mission in Bosnia was not to plan the next fight, but to establish conditions for peace and security so that the country could again establish a functioning government and infrastructure. It was easy for the majority of analysts to become absorbed with current operations and the production of daily briefing products and thus be unable to conduct any serious assessment of future operations. Once EAF compliance became the norm and more subtle ways of undermining the Dayton Peace Accord emerged, the intelligence problem confronting TFE became more complex. It was more like conducting police work, and it was not something with which Army analysts were necessarily comfortable. Long-term analysis was more important in this peace support and troop reduction environment, as TFE worked to help SFOR determine when the conditions in Bosnia would be such that the government no longer needed the presence of NATO troops to be viable.

Previous sections have already discussed much of the augmentation TFE required for its intelligence system. Some augmentation of division capabilities by the corps MI brigade is a normal part of combat operations, but TFE's requirements exceeded typical corps augmentation. Equipment augmentation included off-the-shelf and "purpose-built" SIGINT systems; REMBASS and IREMBASS systems; UAV from EAD sources and the Marine Corps; combat camera crews; digital cameras; equipment to support the OSINT cell; NATO-compatible intelligence processing and communications systems; and equipment to support the ACT or mini-DISE supporting the multinational units.

Resourcing military intelligence personnel was one of the most difficult personnel issues for IFOR and SFOR planners, illustrating a key shortfall in the division intelligence system's ability to support a sustained peace enforcement operation. "No

single MI battalion had all the requisite capabilities to execute the Task Force Eagle (TFE) intelligence mission."89 The capabilities included technical skills, linguists, CI and HUMINT, and analysts. The solution was a combination of composite units, plus a lot of individual augmentees, usually senior noncommissioned officers, warrant officers, and officers. Supporting the deployment of JSTARS, for example, were company commanders from Fort Hood and Fort Bragg. The 303d MI Battalion (Operations) from III Corps' 504th MI Brigade provided the GSM task force, and the 319th MI Battalion (Operations) deployed elements to Hungary and Italy, as well as to Bosnia, in December 1995 and again in October 1996.90 Linguists were in high demand, not only as intercept operators and OSINT, HUMINT, and CI collectors, but also to support the constant interaction soldiers from division to platoon level had with Bosnian military and civil leaders. TFE employed military linguists from all over the Army and contracted additional linguists—and provided them military and theater specific training—to augment them. The HUMINT intensive peace enforcement environment of Bosnia employed a corps complement of CI and HUMINT resources, requiring augmentation of each division.91

Analysts, managers, and planners also came from all over the Army to augment TFE's ACE, nearly doubling its usual size. The G2X was an EAD resource, as were the soldiers comprising the HAC. For Operation JOINT ENDEAVOR, 1<sup>st</sup> Armor Division's MI battalion plus elements of V Corps' 205 MI Brigade created Task Force 205. The 519<sup>th</sup> MI Battalion from Fort Bragg deployed to Bosnia to support 1<sup>st</sup> Armor Division during its second rotation to TFE. Soldiers from the Individual Ready Reserve (IRR), Individual Mobilization Augmentation (IMA), and three reserve component units, the

338<sup>th</sup> MI Battalion from Maryland; 1<sup>st</sup> MI Battalion from Arizona; and the USAR MI Group, 7<sup>th</sup> ARCOM from Heidelberg, Germany backfilled various positions within the theater. The Intelligence and Security Command (INSCOM) also provided many officers and soldiers to augment TFE's staff and fill positions at USAREUR's Crisis Action Team (CAT), the Joint Analysis Center (JAC), and forward sites.<sup>92</sup>

The heavy divisions that served as the nucleus of TFE required considerable modification of and augmentation to their organic intelligence structures for operations in Bosnia. The creation of FPT, OCE, the G2X, and the HAC were the result of TFE's reliance on HUMINT and CI to satisfy its intelligence requirements. The peculiarities of the operation that required tracking peace accord provisions and making long-term assessments resulted in the creation of a Compliance Cell and long and short-term analysis sections within the ACE. To address the shortfalls in the division's organization, the divisions relied not only on internal restructuring, but also on considerable augmentation for manpower and for skills.

#### CONCLUSION

In recent discussions with Advanced Military Studies Program (AMSP) students, two retired senior intelligence officers provided perspectives on the national security environment and threats for the new century. They painted a picture of extreme complexity and ambiguity, with major implications for the nation's defense structure. Their perspectives also have major implications for national and Army intelligence. A decade after the Cold War ended, the US Army remains engaged all over the world.

Some operations are combat-oriented, but most are SASO operations that are non-combat in nature.

By deliberate design, the heavy division intelligence structure has considerable multidiscipline intelligence capability for collecting, processing, analyzing, and disseminating intelligence in a combat environment. Combat experience in the years following World War II called for more intelligence capability directly responsive to the combat commander, and Army intelligence continued to improve this capability, building on the lessons from each conflict. Divisions needed the technological systems for remote collection and targeting, and they needed access to the information available from theater and national assets and databases, especially with the transformation to a force projection Army. Technology seemed to be a way to bring increased capabilities to the division.

The Army became more frequently engaged, however, in environments in which technology was not the preferred solution for intelligence collection but was necessary for communications and database access. Bosnia showcased the division level intelligence system's ability to employ the principles of split-based operations, broadcast intelligence, and tactical tailoring. Despite claims of being able to support full spectrum operations, tactical MI continues to be plagued with legacy systems that are generally inadequate. Operations in Bosnia illustrated that HUMINT is the most effective collection resource in a peace enforcement environment, but the current heavy division has a very lean HUMINT capability. Adequate numbers of HUMINT collectors, proficient linguists, or regional experts do not reside in the division's intelligence system, nor does the division organization provide adequate management or analysis structures. Improvement of the Army's HUMINT and CI capability will take a serious investment,

particularly of time. <sup>93</sup> Divisions plan for corps and higher augmentation of specific resources for combat operations, but for sustained peace enforcement operations, this augmentation is essential to make the division remotely mission capable.

Intelligence in peace enforcement has the same basic requirement as intelligence in combat: to provide information the commander needs to make decisions. The specific requirements are much different, though, and the heavy division intelligence system, designed to support combat operations, lacks the necessary equipment and organization. The solutions that worked in Bosnia demonstrated admirable adaptability, but the solutions came with a cost. There are a finite number of MI resources in the Army, and many soldiers with high-demand, low-density military occupational specialties (MOS) have already served repeated tours in Bosnia. Planning the intelligence architecture is a major undertaking for a force projection Army, and planners of peace enforcement operations must account for the division level deficiencies. The lessons of Operations JOINT ENDEAVOR, GUARD, and FORGE can provide options for other peace enforcement operations and can contribute to the force design debate as the Army moves towards the objective force of the twenty-first century.

#### **ENDNOTES**

<sup>1</sup>The US Army has a history of participation in such operations, but participation in very visible international operations has increased with the end of the Cold War. The debate over the terms seems to have increased also. The current manual for operational terms and graphics provides the term stability and support operations (SASO), and this term is consistent with the emerging doctrine of full-spectrum operations. The content summary identifies four types of military action—offense, defense, stability, and support—in its description of full spectrum operations. At the same time, it uses the terms war and MOOTW to express the full range of operations. US, Department of the Army, FM 101-5-1, Operational Terms and Graphics (Washington, DC: Government Printing Office, 1997), 1-100, 1-143; US, Department of the Army, FM 100-5, Content Summary (Fort Monroe, VA: US Army Training and Doctrine Command, 2000), 8-9. Military Operations Other than War (MOOTW) remains the joint term, and several Army doctrinal manuals published before 1997, including FM 100-5, Operations, use MOOTW or OOTW. US, Joint Chiefs of Staff, Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms (Washington, DC: Government Printing Office, 1994), 285; US, Department of the Army, FM 100-5, Operations (Washington, DC: Government Printing Office, 1993), 13-1 through 13-8.

<sup>2</sup>William J. Clinton, <u>A National Security Strategy for a New Century</u> (Washington, DC: The White House, December 1999), 1-2.

<sup>3</sup>In an article several years ago, Dr. Ernest Evans argued that the Cold War provided considerable barriers to American participation in most SASO missions, including the perception that the US could not be impartial, that it would view every operation in terms of the struggle against communism, that military resources were unlikely to be diverted from preparing for war with the Soviets, and that such operations were simply contrary to the US military culture, particularly after Vietnam. The end of the Cold War removed some of these barriers and even provided some good reasons for the US to get involved. We have combat power, combat support, and logistics capabilities that many other nations do not and that are useful in many SASO environments. Additionally, other nations are often unwilling to commit to an operation without US leadership. Ernest H. Evans, "The US Military and UN Peace Operations," Marine Corps Gazette 81, no.4 (April 1997): 49-50.

<sup>4</sup>US, Department of the Army, <u>FM 34-1</u>, <u>Intelligence and Electronic Warfare Operations</u> (Washington, DC: Government Printing Office, 1994), 1-3. For purposes of this monograph, the tactical intelligence system refers to division-level equipment and organization within the G2 and the divisional military intelligence battalion.

<sup>5</sup>Peace enforcement is one category of peace operations that current Army doctrine describes. The other two are support to diplomacy and peacekeeping. The variables that distinguish these operations are level of consent, level of force, and degree of impartiality. In peace enforcement, consent is not absolute and may require the use of force to compel compliance. The perception of absolute impartiality may be difficult to maintain, especially if the units deployed to enforce the peace need to continually use

force to compel or coerce one of the parties. For example, many Bosnian Serbs would probably accuse IFOR and SFOR of being anti-Serb. US, Department of the Army, <u>FM 100-23, Peace Operations</u> (Washington, DC: Government Printing Office, 1994), 2, 12-13.

<sup>6</sup>Oscar W. Koch, and Robert G. Hays, <u>G2: Intelligence for Patton</u> (Philadelphia, PA: Army Times Publishing Company, distributed by Whitmore Publishing Company, 1971).

<sup>7</sup>Robert G. Glass, and Phillip B. Davidson, <u>Intelligence is for the Commander</u> (Harrisburg, PA: Military Services Publishing Company, 1948).

<sup>8</sup>Emerging doctrine confirms that the Army, although maintaining its primary operational and doctrinal focus on war fighting, must be prepared to conduct SASO. <u>FM</u> 100-5 Content Summary, 4-5. In a briefing to AMSP students, Lieutenant General (Ret.) Patrick Hughes, former Director, Defense Intelligence Agency, said he did not believe the US Army existed to conduct many of the peace and engagement operations it has been called upon to conduct over the past several years. Although he does not believe they are the reason for the Army's existence, he acknowledged the inevitability of the Army's participation, and he said he believes it comes with a cost to our preparedness for war. LTG Hughes' discussion with the AMSP students asked one of the questions this monograph is exploring: Are we as an Army—to include the intelligence system—structured to conduct peace enforcement operations? Patrick Hughes, former Director, Defense Intelligence Agency, briefing to Advanced Military Studies Program students, 14 April 2000, written notes, Fort Leavenworth, Kansas. Information used with LTG Hughes' permission.

<sup>9</sup>Doctrine and a lot of debate about the future of warfare recognize the potential for asymmetric warfare on complex, non-linear battlefields, but the preponderance of our combat training still emphasizes combat against major enemy formations. The primary intelligence tasks are described in detail in FM 34-1, IEW Operations. FM 34-1 was published in 1994, after the end of the Cold War and with a clear appreciation for the fact that the US Army had become a force projection Army. The author does not intend to imply, therefore, that these intelligence tasks do not apply to peace enforcement. The way the division conducts its intelligence operations to perform these tasks may be very different, but the tasks are still applicable. Draft intelligence doctrine addresses the six intelligence functions in detail with respect to SASO. FM 34-1, IEW Operations, 2-7 through 2-15. An update to this field manual is on hold pending publication of the revised FM 100-5, Operations. US Army Intelligence Center and Fort Huachuca, FM 34-7, IEW for Stability Operations and Support Operations, Final Draft (Fort Huachuca, AZ: US Army Intelligence Center and Fort Huachuca, April 2000) [document on-line]; available from http://138.27.35.36/doctrine/dlb.htm; Internet; accessed 21 April 2000.

Additionally, Major Jonathan B. Hunter prepared a monograph in 1993 that directly considered the applicability of these doctrinal tasks to peacekeeping and peace enforcement operations. Published before Operation JOINT ENDEAVOR began, MAJ Hunter's case studies included Lebanon, Northern Ireland, and Somalia. His conclusion

was similar to the author's: the intelligence tasks are applicable, but the traditional means to accomplish them are not effective in peace enforcement. This monograph does not seek to prove the applicability of these tasks to the operations in Bosnia, but uses the intelligence tasks as appropriate to describe intelligence requirements. Major Hunter also pointed out that previous editions of FM 34-1 described only four intelligence tasks—situation development, target development, counterintelligence, and electronic warfare—to support commanders in AirLand Battle operations. Jonathan B. Hunter, "The Doctrinal Functions of Intelligence: Are They Applicable to Peacekeeping and Peace Enforcement Operations?" (MMAS Monograph, Fort Leavenworth, KS: School of Advanced Military Studies, USACGSC, 1993), 3.

<sup>10</sup>FM 34-130, Intelligence Preparation of the Battlefield, provides guidance on how to work through a deliberate process of analyzing the weather, terrain, and enemy for division operations. Typically, the intelligence effort looks one echelon up and two echelons down for evaluating the enemy. IPB is a very important function in combat operations, but also in peace enforcement. While the doctrinal manual tends to provide more guidance for the process in combat, it does offer considerations and examples for OOTW. Publication of a revised version is still on hold. US, Department of the Army, FM 34-130, Intelligence Preparation of the Battlefield (Washington, DC: Government Printing Office, 1994). FM 34-3, Intelligence Analysis, currently has a heavy combat orientation with guidance for OOTW that reflects the experiences of Vietnam and Central America during the 1970s and 1980s. The final draft of a revised version, on the other hand, takes into account the complexity and ambiguity of today's world and the anticipated future operational environment. It provides more theory and models for thinking than instructions for processes. US, Department of the Army, FM 34-3, Intelligence Analysis (Washington, DC: Government Printing Office, 1990); US, Department of the Army, FM 34-3, Intelligence Analysis, Final Draft (Fort Huachuca, Arizona: Doctrine Division, US Army Intelligence Center and School, 2000) [document on-line]; available from http://138.27.35.36/doctrine/dlb.htm; Internet; accessed 8 April 2000.

<sup>11</sup><u>FM 100-5, Operations</u>, 13-0 through 13-1; US, Department of the Army, <u>FM 71-100, Division Operations</u> (Washington, DC: Government Printing Office, 1996), 8-1.

<sup>13</sup>NATO conducted air strikes in May against the Bosnian Serbs to enforce the heavy weapons exclusion zone, and the Bosnian Serbs retaliated by taking UN hostages. In June, the Bosnian government launched an unsuccessful offensive to free Sarajevo. The Bosnian Serbs overran the UN-established safe havens of Srebrenica and Zepa and threatened Gorazde. NATO air strikes intensified in August in an effort to force compliance with the exclusion zone around Sarajevo. Meanwhile, the Croatian Army had conducted two successful offensives to reclaim lost territory. These events created an environment in which the parties were amenable to negotiating for peace. 18 Intelligence and Security Section, 1 MI Bn, The Rat, ARRC Special Edition (BFPO,

<sup>&</sup>lt;sup>12</sup>FM 100-23, Peace Operations, 6, 12.

United Kingdom: HQ ACE Rapid Reaction Corps, January 1996), 5. Obviously, this is a much-abbreviated account of critical events on the path to US Army participation. An important work for understanding the background of the conflict and the context of the NATO mission is Yugoslavia: Death of a Nation. It provides a detailed account of the recent history of the break up of Yugoslavia, including the personalities and politics that drove the disintegration. Laura Silber and Allan Little, Yugoslavia: Death of a Nation, revised and updated ed. (New York: Penguin Books, 1997).

14"History of the NATO-led Stabilisation Force (SFOR) in Bosnia and Herzegovina," 16 November 1998 [document on-line]; available from <a href="http://www.nato.int/sfor/docu/d981116a.htm">http://www.nato.int/sfor/docu/d981116a.htm</a>; Internet; accessed 12 September 1999.

In his article, Dr. Evans discussed Boutros Boutros-Ghali's term "peacebuilding," which he used in a 1992 report. Boutros-Ghali's use of the term included tasks—disarmament of parties, supervising elections, resettling refugees—that for purposes of this monograph and the way in which SFOR operations continue to be characterized may be part of peace enforcement operations. Evans, 49.

In his briefing on the legal aspects of operations in Bosnia, Major Keith Puls, former SJA for 10<sup>th</sup> Mountain Division in Bosnia, emphasized the fact that IFOR deployed and SFOR continues to operate under Chapter VII of the UN Charter, which is associated with peace enforcement. Chapter VI generally guides peace keeping operations. Keith Puls, former SJA for 10<sup>th</sup> Mountain Division, "Legal Aspects of Operations in Bosnia," briefing to 3ID commanders and staff during its Decision Making Exercise (DME), written notes, Fort Stewart, Georgia, 1 May 2000.

As of April 2000, when the US Army had ten active component divisions, the following divisions have served as the basis for TFE headquarters: 1st Armor Division, 1st Infantry Division, 1st Cavalry Division, and 10th Mountain Division. The 49th Armor Division from the Texas National Guard assumed responsibility for TFE headquarters in March 2000, and the 3rd Infantry Division will take over the mission in October. To date, the 10th Mountain Division is the only light division that has led TFE, but the 29th Infantry Division (Light) from the Virginia National Guard and 101st Airborne Division (Air Assault) will enter the rotation schedule following 3rd Infantry Division's year. Media Relations Division, "Rotation Plan: Bosnia," Press Release 99-100 (Washington, DC: Office of the Chief of Public Affairs, 26 October 1999) [document on-line]; available from <a href="http://www.dtic.mil/armylink/news/Oct1999/r19991026sfor.html">http://www.dtic.mil/armylink/news/Oct1999/r19991026sfor.html</a>; Internet; accessed 12 April 2000.

15The author credits Major Brian Gates for suggesting such a distinction among the intelligence environments. Discussions with Major Gates; Major John Kope, G2 Plans Officer for 1st Armor Division during its second rotation as TFE headquarters; and with Major Matt Glunz, G2 Plans Officer for 10th Mountain Division during its leadership of TFE, convinced the author that it was necessary to consider the evolution of intelligence requirements over the course of US Army operations in Bosnia. Also useful was the author's assignment to the Combat Maneuver Training Center (CMTC) in Hohenfels, Germany. While there, the author participated in most of the training that occurred from 1996 to June 1998 for the mission in Bosnia. This included Mountain

Eagle mission rehearsal exercises (MRE) for deploying units and Individual Replacement Training for individual soldiers deploying. The author's involvement in building or driving scenarios and in conducting well over a hundred country overview briefings provided the background for recognizing a significant shift in the way TFE has operated since 1998. The author chose terms to distinguish the intelligence environment but that would not imply that TFE's current operations are anything other than peace enforcement. They should imply, however, that the character of a peace enforcement operation can alter over time, and the force needs to appreciate shifts in the environment for operations and for intelligence implications. Brian Gates, former Division Collection Manager for 1st Infantry Division, discussions with author, March and April 2000, written notes, Fort Leavenworth, Kansas; John Kope, former G2 Plans Officer for 1st Armor Division, interview by author, 24 April 2000, written notes, Leavenworth, Kansas; Matt Glunz, former G2 Plans Officer, 10<sup>th</sup> Mountain Division, interview by author, 27 April 2000, telephone conversation, Leavenworth, Kansas; Kathleen A. Phillips, "Bosnia-Herzegovina Country Overview," briefing presented and modified for Individual Replacement Training at the Combat Maneuver Training Center, Hohenfels, Germany, 1996-1998.

An interesting and valuable study of intelligence requirements in peacekeeping operations since the end of the Cold War is Dr. David A. Charters' "Out of the Closet: Intelligence Support for Post-Modernist Peacekeeping." His study is in the context of UN missions. David A. Charters, "Out of the Closet: Intelligence Support for Post-Modernist Peacekeeping," in <a href="The Pearson Papers">The Pearson Papers</a>, Paper Number 4: Intelligence in Peacekeeping, A. Walter Dorn and David A. Charters (Toronto, Ontario, Canada: Brown Book Company Ltd., 1999), 35-68.

<sup>16</sup>"General Framework Agreement for Peace," 30 November 1995 [document online]; available from <a href="http://www.nato.int/ifor/gfa\_home.htm">http://www.nato.int/ifor/gfa\_home.htm</a>; Internet; accessed 22 January 1997.

17William B. Buchanan, Robert C. Holcomb, Martin A. Lidy, and Samuel H.
 Packer, Operation Joint Endeavor: Description and Lessons Learned (Implementation, Transition, and Reployment Phases) (Alexandria, VA: Institute for Defense Analyses, July 1997), microfiche, I-9. This report detailed some of the tasks TFE conducted in order to implement the provisions of the GFAP. It also highlighted the high number of soldiers required to conduct force protection tasks.

Headquarters After Action Report (Heidelberg, GE: US Army Europe, May 1997), 74-78, 81, 84. LTC Jeffrey Rapp, former G2 for TFE, prepared a paper that gives a good summary of the environment in Bosnia and the type of intelligence that was particularly important for division operations. His insights are key evidence for the following chapter on intelligence equipment. Jeffrey Rapp, "Intelligence Requirements for Military Operations Other Than War" (US Army War College Strategy Research Project, Carlisle Barracks, PA: US Army War College Strategic Studies Institute, 1998), microfiche, 14-19.

<sup>19</sup>Hunter, 22. The need to have a sense of the local patterns and pulse of the population was a clear lesson from Somalia.

<sup>20</sup>Buchanan et al, 4, I-11, VI-3 through VI-4.

<sup>21</sup>Kope, interview; USAREUR, 81; Puls, briefing.

<sup>22</sup>David L. Grange, and John S. Rovegno, "Setting the Stage: Peacekeeping Operations Demand Unconventional Military Approaches," <u>Armed Forces Journal International</u> (March 1998): 44. Major General Grange served as Commander, Task Force Eagle, and Lieutenant Colonel Rovegno served as his G2 in Bosnia.

<sup>23</sup>Ibid, 45. Another division G2 told the author that everything in Bosnia was tied to political agendas, and that each ethnic group was good at manipulation to justify its work towards their agenda. Resettlement, for example, was less about reclaiming lost property and more about regaining territory that had been lost in the war.

<sup>24</sup>Glunz, interview. The author's participation in 3<sup>rd</sup> Infantry Division's Decision Making Exercise (DME)—one of a series of exercises to build the TFE staff and prepare for the operation in Bosnia—in early May confirmed the environment as Major Glunz described it. The "anti-Dayton pyramid" was a paradigm that several briefers, mostly former staff officers within TFE, used to describe the complexity of the current operational environment. General (Ret) Crouch, the Senior Observer for the DME, used the term "intellectual warfare" to describe TFE operations in light of this complexity. He also stressed the importance of asking the question "why" to ensure those serving in TFE get to the real issue when facing a new mission or situation.

<sup>25</sup>Ibid.

<sup>26</sup>Kathleen A. Phillips, "Army Tactical Electronic Intelligence in Asia: Support of Combat Operations Since World War II" (Masters Thesis, Bolling Air Force Base, VA: Defense Intelligence College, Postgraduate Intelligence Program, 1992), 2-3, 6, 17. In this paper, the author traces the development of Army tactical signals intelligence based on the experiences in the Korean War and the Vietnam War.

<sup>27</sup>Charles B. Eichelberger, "The MI Corps: Vision of the Future," <u>Military</u> <u>Intelligence</u> 17, no. 4 (October-December 1991): 7-8.

<sup>28</sup>Phillips, "Army Tactical Electronic Intelligence," 43.

<sup>29</sup>MI Relook Task Force, <u>Executive Summary: Military Intelligence Relook Task</u> <u>Force Final Report</u> (Washington, DC: Department of the Army, 1991), v, viii.

<sup>30</sup>US, Department of the Army, <u>FM 34-25-3</u>, <u>All Source Analysis System and the Analysis and Control Element</u> (Washington, DC: Government Printing Office, 1995)

[document on-line]; available from <a href="http://www.adtdl.amy.mil/cgi\_bin/atdl.dll/fm/34-25-3/">http://www.adtdl.amy.mil/cgi\_bin/atdl.dll/fm/34-25-3/</a>; Internet; accessed 29 April 2000.

<sup>31</sup>FM 34-25-3, ASAS and the ACE, 1-5 through 1-7. In addition to its organic MI battalion, the division has several other valuable intelligence assets, such as its cavalry squadron, MPs, target acquisition radar, aviation assets, and patrols. Most of these assets are multi-functional, and intelligence collection is not their only, or even primary, role. The focus of this monograph is on the division level intelligence staff and its MI battalion, the major components of its intelligence system. It might also be helpful to note here that the ACE is organic to the divisional MI battalion, but it is OPCON to the G2 for operations. The issues associated with that could provide the basis for a separate monograph. The next chapter provides further explains the division's intelligence organizations.

<sup>32</sup><u>FM 71-100, Division Operations</u>, 1-14 through 1-15; US, Department of the Army, <u>FM 34-8-2, Intelligence Officer's Handbook</u> (Washington, DC: Government Printing Office, 1998), H-1. The author has heard about GBCS for almost 13 years, and it has never become a reality for a division. The program was finally cancelled in FY98, with Prophet as a planned replacement. The contract for Prophet was projected for the second quarter FY00. UAVs are available for units at the National Training Center, but they are not yet organic to the division structure, despite promised fielding in FY99. "1999 Weapons and Equipment Directory," <u>Army</u> (October 1999): 285, 292.

associated with different battlefield operating systems (BOS): Maneuver Control System (MCS) for the maneuver BOS, ASAS for the intelligence BOS, Advanced Field Artillery Tactical Data System (AFATDS) for the fire support BOS, Forward Area Air Defense Artillery Command and Control System (FAADC2) for the air defense BOS, and Combat Service Support Control System (CSSCS) for the logistics BOS. The ATTCS are part of the Army's Battle Command System, which also includes the Global Command and Control System-Army (GCCS-A) for corps and above operations centers and the Force XXI Battle Command Brigade and Below (FC2B2) for brigade and below operations centers. This summary information is based on the author's notes from A308, Advanced War fighting, a Command and General Staff College (CGSC) elective that focused on Force XXI concepts and operations in the digital division.

<sup>34</sup>FM 71-100, Division Operations, 1-14 through 1-15, 3-9; FM 34-25-3, ASAS and the ACE, 4-7 through 4-11. As of April 2000, no two divisions have exactly the same such systems. The systems residing in each ACE depend on where the division is in the fielding plan, what its participation in Force XXI experimentation and conversion has been, and what its operational experience with force enhancement packages or missions like Bosnia and Kosovo has been.

<sup>35</sup>Hughes, briefing. LTG (R) Hughes also believes Army intelligence is not well-equipped or structured for combat of the future.

<sup>36</sup>USAREUR, 25; Zachary Lum, "Balkan Eyes: Airborne Recon over Bosnia," <u>Journal of Electronic Defense</u> 18, no. 11 (November 1995): 57.

<sup>37</sup>Larry Wentz, ed., <u>Lessons from Bosnia: The IFOR Experience</u> (Washington, DC: National Strategic Studies Institute, 1997), 105.

<sup>38</sup><u>FM 34-7, IEW for SASO, Final Draft,</u> 2-8; Gates, interview; Kope, interview; Glunz, interview.

<sup>39</sup>FM 34-1, IEW Operations, 6-3; Gates, interview; "Intelligence Operations," in Analyses, Lessons Learned, News Stories (Fort Leavenworth, KS: Center for Army Lessons Learned, March 1998) [CALL Restricted Database]; available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de\_call\_8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_D\_OCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOCTEXT=YES; Internet; accessed 18 April 2000.

<sup>40</sup>Jack McNeely, "New Ground Surveillance System Being Tested by MI Battalion," <u>Talon</u> 04, no. 35 (August 1998) [document on-line]; available from <a href="http://www.tfeagle.army.mil/talon/21August98/story1.html">http://www.tfeagle.army.mil/talon/21August98/story1.html</a>; accessed 18 April 2000. The author has not found any further information on the system or its utility. The GSR is a very old system in need of replacement; there are better systems available and in use by our allies. This testing needs to lead to a serious procurement program.

<sup>41</sup>FM 34-8-2, Intelligence Officer's Handbook, H-2; USAREUR, 92. The 2<sup>nd</sup> Infantry Division also has REMBASS, which was useful in its efforts to monitor the Korean Demilitarized Zone (DMZ). The author commanded B Company, 102d MI Bn and had a platoon of GSR and REMBASS operators. The author encountered one of those soldiers during a visit to Bosnia in May 1997; the soldier was then assigned to the 101<sup>st</sup> Air Assault Division.

424 BHCAAT Elections Initial Impressions Report, Appendix A: Observations," in Analyses, Lessons Learned, News Stories (Fort Leavenworth, KS: Center for Army Lessons Learned, March 1998) [CALL Restricted Database]; available from <a href="http://160.149.150.44/cgi-bin/cqgi/@de\_call\_8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOCTEXT=YES;">htternet</a>; accessed 18 April 2000.

<sup>44</sup>Collin A. Agee, "Joint STARS in Bosnia: Too Much Data, Too Little Intel?" Military Intelligence 22, no.4 (October-December 1996): 7.

<sup>&</sup>lt;sup>43</sup>Lum, "Balkan Eyes," 52-53.

<sup>45</sup>USAREUR, 86-87; Jody Blanchfield, Air Force officer and former Senior Director for JSTARS during Operation JOINT ENDEAVOR, discussion with author, 27 April 2000, written notes, Fort Leavenworth, Kansas. Discussions with other officers familiar with the JSTARS deployment to Bosnia suggested that the system was deployed largely for political reasons, as NATO was considering buying such a system. The deployment was an opportunity to demonstrate its capabilities. In his article on the JSTARS experience in Bosnia, Lieutenant Colonel Agee echoed this idea when he wrote that NATO's consideration of a surveillance system affected the deployment of the JSTARS and the Ground Station Module (GSM) teams. Agee, 6.

<sup>46</sup>USAREUR, 86-87; Agee, 9; Blanchfield, interview; Gates, interview; Kope, interview; Glunz, interview; Kristin M. Baker, "Operation JOINT ENDEAVOR: Joint STARS in the Balkans," <u>Military Intelligence</u> 22, no.4 (October-December 1996): 27.

<sup>53</sup>Wentz, 69, 107; Glunz, interview. The author saw digital cameras become important to battalion S2s during the early mission rehearsal exercises at CMTC. By June 1998, it was practically an assumption that units would have these cameras to provide organic imagery support. Battalion S2s were also becoming more proficient at requesting and using the imagery support of the division's aviation assets.

<sup>54</sup><u>FM 34-1, IEW Operations</u>, 6-2; Hunter, 24; David D. Perkins, <u>HUMINT/CI</u> (Fort Leavenworth, KS: Center for Army Lessons Learned, November 1997) [CALL Special Products Database]; available from <a href="http://call.army.mil/call/spc\_prod/humint/humint.htm">http://call.army.mil/call/spc\_prod/humint/humint.htm</a>. Internet; accessed 1 September 1999, 3-6.

<sup>&</sup>lt;sup>47</sup>Agee, 9-10; Baker, 28; Blanchfield, interview; Gates, interview.

<sup>&</sup>lt;sup>48</sup>Lum, "Balkan Eyes," 53-54, 56.

<sup>&</sup>lt;sup>49</sup>USAREUR, 87.

<sup>&</sup>lt;sup>50</sup>Lum, "Balkan Eyes," 56.

<sup>&</sup>lt;sup>51</sup>Brian J. Shortsleeve, "Realtime Imagery for Ground Commanders in Bosnia," Marine Corps Gazette 82, no. 4 (April 1998): 34.

<sup>&</sup>lt;sup>52</sup>Gates, interview; Glunz, interview.

<sup>55</sup>Perkins, 24. It is important to distinguish the roles of HUMINT and CI. HUMINT was a source of information that directly answered commander's intelligence requirements or contributed to TFE's intelligence picture. CI used multiple disciplines to identify and help commanders mitigate the threats to their units. Their operations were, as LTC Perkins said, intertwined in Bosnia. The next chapter explains the organizations of the collection teams.

In his presentation to the current SAMS class, Colonel Dunlap discussed the significance of culture in future conflicts and the deficiency of US HUMINT, which results in less than a full appreciation of the cultural context of conflicts. Charles J. Dunlap, "Future of War: A Perspective," briefing to Advance Military Studies Program students, 10 May 2000, written notes, Fort Leavenworth, Kansas. Information used with Colonel Dunlap's permission.

<sup>56</sup>Perkins, 10; BHCAAT, 67.

<sup>57</sup>Kathleen A. Gavle, "Division Battle Staff Requirements for Sustained Peace Enforcement Operations" (MMAS Monograph, Fort Leavenworth, KS: School of Advanced Military Studies, USACGSC, 1999), 20.

<sup>58</sup>BHCAAT, 72; Jonathan White, former Joint Commission Officer, Task Force Eagle, discussions with author, 22 November 1999 and 27 April 2000, email exchange and written notes, Fort Leavenworth, Kansas.

<sup>59</sup>Charters, 61; <u>Joint Task Force Commander's Handbook for Peace Operations</u> (Fort Monroe, VA: Joint War fighting Center, 16 June 1997), VII-2. Dr. Sarah Archer, a registered nurse with many years of experience in UN and other NGO operations, participated in 3<sup>rd</sup> Infantry Division's Decision Making Exercise—a training exercise in preparation for its rotation to Bosnia in September—in May 2000. She was adamant about the fact that NGOs and other international agencies are not collection assets and cannot be tasked. However, she was equally adamant about the fact that the relationships established between soldiers and such agencies determine whether their interaction is mutually beneficial or not. She said there are times when the protection US soldiers try or feel they must offer actually endangers NGOs, and they may refuse such help. At the same time, NGOs may get the first indication of impending trouble and be willing to share such information with the soldiers. Her perspective reinforced the complexity of peace enforcement operational environments.

<sup>60</sup>Glunz, interview; "Intelligence Operations." Though generally more coordinated, CI and HUMINT teams had their own problems with duplication and multiple contacts of a single source to which TFE intelligence managers had to constantly devote attention.

<sup>61</sup>Rapp,18.

<sup>62</sup>FM 34-1, IEW Operations, 2-4 through 2-7; FM 34-7, IEW for SASO, Final Draft, 2-12, 4-3. Open source intelligence has always been recognized as a tool for the

all source analyst, but current doctrine only recognizes the disciplines of SIGINT, IMINT, HUMINT, and MASINT, plus the two multidisciplinary intelligence functions of counterintelligence and technical intelligence. Draft doctrine, however, mentions OSINT, particularly with respect to the experience in Bosnia. Furthermore, this draft doctrine captures many lessons from Bosnia.

Rapp, 21; Wyn Bowen, "Open-Source Intel: A Valuable National Security Resource," <u>Jane's Intelligence Review</u> 11, no. 11 (November 1999): 50-54. Bowen's article explained a recent emphasis on open source intelligence and highlighted the value, given reduced budgets, of exploiting open sources in order to cut costs and use limited intelligence resources more effectively. Dr. Bowen also described the advantages and risks associated with open source intelligence, some of which the author reviewed with respect to operations in Bosnia. Dr. Bowen assumed private sector experts were doing the exploitation; this is not the case in Bosnia.

<sup>63</sup>The author first encountered the <u>Night Owl</u> during a mission rehearsal exercise (MRE) at CMTC. Soldiers from the 165<sup>th</sup> Military Intelligence Battalion, who supported CMTC during the MRE, were pulling the <u>Night Owl</u> from their database to provide it as an intelligence product to battalion S2s. As part of a visit to TFE headquarters in May 1997, the author received a briefing by the officer in charge of the section producing the <u>Night Owl</u>. It had become an essential part of the commander's daily read file. Wentz, 70.

<sup>64</sup>Wentz, 86.

<sup>65</sup>USAREUR, 83; Paul Menoher, former DSCINT, interview by Dr. Richard Hunt, US Army Center of Military History, 3 February 1997, written notes, Washington, DC. [CALL Restricted Database]; available from <a href="http://160.149.150.44/cgibin/cqcgi/@de-call-8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_DOCUMENT=51&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOCTEXT=YES; Internet; accessed 18 April 2000.

<sup>66</sup>Perkins, 13.

<sup>67</sup>Menoher, interview; Jerry V. Proctor, "CI/HUMINT Automation—Step One," Military Intelligence 24, no. 3 (July-September 1998): 60; "1999 Weapons and Equipment Directory," 283.

<sup>68</sup>USAREUR, 73.

<sup>69</sup>Based on his case studies of US operations in Lebanon and Somalia, Major Hunter drew the same conclusion. Hunter, 38.

<sup>70</sup>FM 71-00, Division Operations, 1-14 through 1-15; FM 34-8-2, Intelligence Officer's Handbook, H-1. As in the previous chapter, this chapter does not emphasize the important role of the division cavalry squadron, aviation brigade, fire support radars, or scouts. The focus given to the MI Battalion, even though three of its companies are in

direct support of maneuver brigades, is due to the battalion's provision of the specific intelligence disciplines. Other components of the G2—G2 operations, G2 plans, the Special Security Officer (SSO), the Staff Weather Officer (SWO), and the terrain team—do not receive attention in this monograph. The terrain team received some additional support and products from EAD sources. The planner had to approach the operational context differently and obtain different types of products from the ACE. Overall, though, their operations in Bosnia were very similar to their operations in combat and do not contribute to the argument of this paper.

<sup>76</sup>"Intelligence Operations;" "Intelligence and the Military Information Environment," in <u>Analyses, Lessons Learned, News Stories</u> (Fort Leavenworth, KS: Center for Army Lessons Learned, May 1996) [CALL Restricted Database]; available from <a href="http://160.149.150.44/cgi-bin/cqgi/@de\_call\_8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOCTEXT=YES; Internet; accessed 18 April 2000.

<sup>77</sup>BHCAAT, 15. The direct support companies have three counterintelligence teams and three interrogation teams. These were the basis of the Force Protection Teams, which are further explained later in the chapter.

<sup>&</sup>lt;sup>71</sup>FM 34-25-3, ASAS and the ACE, 2-1.

<sup>&</sup>lt;sup>72</sup>FM 71-100, Division Operations, 3-9 through 3-10.

<sup>&</sup>lt;sup>73</sup>FM 34-25-3, ASAS and the ACE, 2-3 through 2-4.

<sup>&</sup>lt;sup>74</sup>Ibid., 2-9 through 2-11.

Arnold Abraham, "The National Intelligence Support Team in Somalia,"
 Marine Corps Gazette 82, no. 4 (April 1998): 29.

<sup>&</sup>lt;sup>78</sup>Menoher, interview; Perkins, 7.

<sup>&</sup>lt;sup>79</sup>BHCAAT, 24.

<sup>&</sup>lt;sup>80</sup>FM 34-7, IEW for SASO, Final Draft, 2-17 through 2-18.

<sup>81&</sup>quot;Military Intelligence Support," in <u>Task Force Hawk CAAT: Operation ALLIED FORCE</u> (Fort Leavenworth, KS: Center for Army Lessons Learned, January 2000) [CALL Restricted Database]; available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de\_call\_8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_DOCUMENT=29&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOCTEXT=YES; Internet; accessed 18 April 2000.

<sup>82</sup>Perkins, 12.

<sup>83</sup>Although there is no further information currently available on the home page, the G2X concept is listed on the page with draft and recently approved doctrine. Directorate of Combat Developments, New and Emerging: J2X/S2X (Fort Huachuca, Arizona: Doctrine Division, US Army Intelligence Center and School, 2000) [document on-line]; available from <a href="http://138.27.35.36/doctrine/dlb.htm">http://138.27.35.36/doctrine/dlb.htm</a>; Internet; accessed 21 April 2000.

<sup>84</sup>Menoher, interview.

<sup>85</sup>Perkins, 7-8; Glunz, interview; <u>JTF Commander's Handbook</u>, VII-6; US, Joint Chiefs of Staff, <u>Joint Publication 2-01</u>, <u>Joint Intelligence Support to Military Operations</u> (Washington, DC: Government Printing Office, 1996), A-4 through A-5.

Compliance Cell. She was essentially TFE's subject matter expert (SME) on the weapons storage site inspections and training and movement issues, and she represented MND(N) at SFOR compliance meetings in Sarajevo. Gates, interview. Joint Military Commission Policies, Procedures, and Command Guidance Handbook, 6<sup>th</sup> ed. (Tuzla, Bosnia: Multinational Division (North) Joint Military Commission, 12 January 1998). The JMC Handbooks provided a lot of useful information to IFOR and SFOR soldiers in a ready reference format. The handbooks consolidated the key points of the major SOPs and policies and provided guidance for soldiers' actions. The 10<sup>th</sup> Mountain Division put the Compliance Cell under the JMC. Glunz, interview. Colonel Matteson, who led the JMC during 1<sup>st</sup> Infantry Division's rotation and 10<sup>th</sup> Mountain Division's rotation to Bosnia, discussed his role and the evolution of the character of the ITP during his participation in 3<sup>rd</sup> Infantry Division's Decision Making Exercise, 1-5 May 2000.

<sup>87</sup>Gates, interview. This organization was in place by the author's May 1997 visit and was one aspect of the information 1<sup>st</sup> Infantry Division provided about its intelligence operations to MI officers from CMTC to guide future training.

National Guard), which is currently serving as TFE Headquarters, are police officers. At the May 2000 exercise, the inbound G2 for 3<sup>rd</sup> Infantry Division's assumption of TFE leadership told the author that the 49<sup>th</sup> Armor Division took software used in police work to Bosnia; that software might assist the analytical effort to make associations and determine patterns of those still undermining the peace process.

89" Lessons Learned," in <u>The Stabilization Force Planning Process</u> (Fort Leavenworth, KS: Center for Army Lessons Learned, January 1999) [CALL Restricted Database]; available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de\_call\_8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOCTEXT=YES; Internet; accessed 18 April 2000.

<sup>90</sup> Agee, 10; Federation of American Scientists, "303<sup>rd</sup> Military Intelligence Battalion (Operations)" [document on-line]; available from <a href="http://www.fas.org/irp/agency/army/forscom/iii corps/504\_mi\_bde/index.htm">http://www.fas.org/irp/agency/army/forscom/iii corps/504\_mi\_bde/index.htm</a>; Internet; accessed 25 April 2000; Federation of American Scientists, "319th Military Intelligence Battalion (Operations)" [document on-line]; available from <a href="http://www.fas.org/irp/agency/army/forscom/xvii\_corps/525\_mi\_bde/319\_mi\_bn/index.html">http://www.fas.org/irp/agency/army/forscom/xvii\_corps/525\_mi\_bde/319\_mi\_bn/index.html</a>; Internet; accessed 25 April 2000. In his article, LTC Agee also made the point that planned changes to the corps MI Brigade Modified Tables of Organization and Equipment (MTOE) would eliminate the GSM company, potentially complicating the logistics and command and control for similar operations in the future. His contention was that the GSM—and CGS—operators were doing more than just operating the system.

<sup>91</sup>BHCAAT, 24; "Intelligence Operations."

<sup>&</sup>lt;sup>92</sup>USAREUR, 79-80; Perkins, 12; Gates, interview; Kope, interview; Glunz, interview.

<sup>&</sup>lt;sup>93</sup>In his paper, LTC Rapp highlighted the need to exploit police tools that can help determine relationships and patterns, as well as the need to invest in the personnel and time to give the Army an improved HUMINT capability. Rapp, 22-23.

#### **SELECTED BIBLIOGRAPHY**

### GOVERNMENT PUBLICATIONS AND DOCUMENTS

- Chief of Staff, US Army. Memorandum 74-5-107. Subject: Army Intelligence Organization and Stationing Study. 5 December 1974.
- Clinton, William J. <u>A National Security Strategy for a New Century</u>. Washington, DC: The White House. December 1999.
- Directorate of Combat Developments. New and Emerging: J2X/S2X. Fort Huachuca, Arizona: Doctrine Division, US Army Intelligence Center and School, 2000. Document on-line. Available from <a href="http://138.27.35.36/doctrine/dlb.htm">http://138.27.35.36/doctrine/dlb.htm</a>. Internet. Accessed 21 April 2000.
- "General Framework Agreement for Peace." 30 November 1995. Document on-line. Available from <a href="http://www.nato.int/ifor/gfa\_home.htm">http://www.nato.int/ifor/gfa\_home.htm</a>. Internet. Accessed 22 January 1997.
- Government Accounting Office. <u>Bosnia Peace Operation: Mission, Structure, and Transition Strategy of NATO's Stabilization Force</u>. Letter Report, GAO/NSIAD-99-19. Washington, DC: Government Accounting Office, 8 October 1998. Document on-line. Available from <a href="http://frwebgate.access.gpo.gov/cgi-bin/useftp.ctgi?Ipaddress=162.140.64.88&filename-/ga">http://frwebgate.access.gpo.gov/cgi-bin/useftp.ctgi?Ipaddress=162.140.64.88&filename-/ga</a>. Internet. Accessed 7 September 1999.
- Government Accounting Office. <u>Peace Operations: Update on the Situation in the Former Yugoslavia, Briefing Report to the Majority Leader, US Senate.</u>
  Washington, DC: Government Accounting Office, 1995.
- Headquarters, US Special Operations Command. <u>US Special Operations Command History, 2d ed.</u> MacDill Air Force Base, FL: USSOCOM/SOCS-HO, History and Research Office, 1998.
- <u>Joint Task Force Commander's Handbook for Peace Operations</u>. Fort Monroe, VA: Joint Warfighting Center, 16 June 1997.
- Media Relations Division, Office of the Chief of Public Affairs. "Army Announces Unit Rotation Plan for Bosnia." News Release 99-100. Washington, DC: US Army Public Affairs, 26 October 1999.
- MI Relook Task Force. Executive Summary: Military Intelligence Relook Task Force Final Report. Washington, DC: Department of the Army, 1991.
- US Army Intelligence Center and Fort Huachuca. FM 34-7, IEW for Stability Operations

- and Support Operations, Final Draft. Fort Huachuca, AZ: US Army Intelligence Center and Fort Huachuca, April 2000. Document on-line. Available from <a href="http://138.27.35.36/doctrine/dlb.htm">http://138.27.35.36/doctrine/dlb.htm</a>. Internet. Accessed 21 April 2000.
- US Army Intelligence Center and Fort Huachuca. FM 34-10, Division Intelligence and Electronic Warfare Operations, Revised Initial Draft. Fort Huachuca, AZ: US Army Intelligence Center and Fort Huachuca, August 1997.
- US, Department of the Army. <u>FM 34-1, Intelligence and Electronic Warfare Operations</u>. Washington, DC: Government Printing Office, 1994.
- US, Department of the Army. <u>FM 34-3, Intelligence Analysis</u>. Washington, DC: Government Printing Office, 1990.
- US, Department of the Army. FM 34-3, Intelligence Analysis, Final Draft. Fort Huachuca, Arizona: Doctrine Division, US Army Intelligence Center and School, 2000. Document on-line. Available from <a href="http://138.27.35.36/doctrine/dlb.htm">http://138.27.35.36/doctrine/dlb.htm</a>. Internet. Accessed 8 April 2000.
- US, Department of the Army. <u>FM 34-8-2, Intelligence Officer's Handbook</u>. Washington, DC: Government Printing Office, 1998.
- US, Department of the Army. <u>FM 34-10, Division Intelligence and Electronic Warfare Operations</u>. Washington, DC: Government Printing Office, 1986.
- US, Department of the Army. FM 34-25-3, All Source Analysis System and the Analysis and Control Element. Washington, DC: Government Printing Office, 1995.

  Document on-line. Available from <a href="http://www.adtdl.amy.mil/cgi\_bin/atdl.dll/fm/34-25-3/">http://www.adtdl.amy.mil/cgi\_bin/atdl.dll/fm/34-25-3/</a>. Internet. Accessed 29 April 2000.
- US, Department of the Army. FM 34-60, Counterintelligence, Washington, DC: Government Printing Office, 1995. Document on-line. Available from <a href="http://www.adtdl.army.mil/cgi\_bin/atdl.dll/fm/34-60/">http://www.adtdl.army.mil/cgi\_bin/atdl.dll/fm/34-60/</a>. Internet. Accessed 22 April 2000.
- US, Department of the Army. <u>FM 34-130, Intelligence Preparation of the Battlefield.</u> Washington, DC: Government Printing Office, 1994.
- US, Department of the Army. <u>FM 71-100, Division Operations</u>. Washington, DC: Government Printing Office, 1996.
- US, Department of the Army. <u>FM 100-5, Operations</u>. Washington, DC: Government Printing Office, 1993.
- US, Department of the Army. FM 100-5, Content Summary. Fort Monroe, VA: US

- Army Training and Doctrine Command, 2000.
- US, Department of the Army. <u>FM 100-6, Information Operations</u>. Washington, DC: Government Printing Office, 1996.
- US, Department of the Army. <u>FM 100-7, Decisive Force: The Army in Theater Operations</u>. Washington, DC: Government Printing Office, 1995.
- US, Department of the Army. <u>FM 100-23, Peace Operations</u>. Washington, DC: Government Printing Office, 1994.
- US, Department of the Army. <u>FM 101-5</u>, <u>Staff Organization and Operations</u>. Washington, DC: Government Printing Office, 1997.
- US, Department of the Army. <u>FM 101-5-1, Operational Terms and Graphics</u>. Washington, DC: Government Printing Office, 1997.
- US, Department of Defense. Bosnia Country Handbook, December 1995.
- US, Department of Defense. Bosnia Country Handbook, May 1996.
- US, Department of Defense. Bosnia Country Handbook, February 1997.
- US, Joint Chiefs of Staff. <u>Joint Publication 1-02</u>, <u>Department of Defense Dictionary of Military and Associated Terms</u>. Washington, DC: Government Printing Office, 1994.
- US, Joint Chiefs of Staff. <u>Joint Publication 2-01, Joint Intelligence Support to Military Operations</u>. Washington, DC: Government Printing Office, 1996.

#### AFTER ACTION REVIEWS, LESSONS LEARNED, AND STUDIES

Bosnia-Herzegovina After Action Review (BHAAR I). Carlisle Barracks, PA: US
Army Peacekeeping Institute, 1996. Document on-line. Available from
Instihttp://www.eucom.smil.mi./eccsas/library...ration\_joint\_endeavour/aar/aar\_bh\_1.html. Internet. Accessed 28
July 1999.

- "BHCAAT Elections Initial Impressions Report, Appendix A: Observations." In Analyses, Lessons Learned, News Stories. Fort Leavenworth, KS: Center for Army Lessons Learned, March 1998. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqgi/@de call 8773.env?CQ SESSION KEY=TAQNRHDBBTDP&CQ C UR DOCUMENT=72&CQ SAVE[Show Doc1]=TRUE&CQ RESULTS DOC TEXT=YES. Internet. Accessed 18 April 2000.
- Buchanan, William B., Robert C. Holcomb, Martin A. Lidy, and Samuel H. Packer.

  Operation Joint Endeavor: Description and Lessons Learned (Implementation,

  Transition, and Reployment Phases.) Alexandria, VA: Institute for Defense
  Analyses, July 1997. Microfiche.
- "Combat Maneuver Training Center Stability Operations Lessons Learned." Fort Leavenworth, KS: Center for Army Lessons Learned, January 1996. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de c...E[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOC\_TEXT=YES">http://160.149.150.44/cgi-bin/cqcgi/@de c...E[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOC\_TEXT=YES</a>. Internet. Accessed 17 October 1999.
- Dorn, A. Walter and David A. Charters. <u>The Pearson Papers, Paper Number 4:</u>
  <u>Intelligence in Peacekeeping.</u> Toronto, Ontario, Canada: Brown Book Company Ltd., 1999.
- Institute for Defense Analyses. Operation Joint Endeavor USEUCOM After Action Review, Vol I. Alexandria, VA: Institute for Defense Analyses, April 1997.
- "Intelligence and the Military Information Environment." In <u>Analyses, Lessons Learned, News Stories</u>. Fort Leavenworth, KS: Center for Army Lessons Learned, May 1996. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgibin/cqgi/@de-call-8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_CUR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOC\_TEXT=YES</a>. Internet. Accessed 18 April 2000.
- "Intelligence Operations." In <u>Analyses, Lessons Learned, News Stories</u>. Fort Leavenworth, KS: Center for Army Lessons Learned, March 1998. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de\_call\_8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_C\_UR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOC\_TEXT=YES.">TEXT=YES.</a> Internet. Accessed 18 April 2000.
- "Lessons Learned." In <u>The Stabilization Force Planning Process</u>. Fort Leavenworth, KS: Center for Army Lessons Learned, January 1999. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de-call-8773.env?CQ-SESSION\_KEY=TAQNRHDBBTDP&CQ-C-UR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOC\_TEXT=YES.">https://document-superiorgitalization Force Planning Process.</a>. Fort Leavenworth, KS: Center for Army Lessons Learned, January 1999. CALL Restricted Database. Available from <a href="https://doi.org/10.149/150.44/cgi-bin/cqcgi/@de-call-8773.env?CQ\_SESSION\_KEY=TAQNRHDBBTDP&CQ\_C\_UR\_DOCUMENT=72&CQ\_SAVE[Show\_Doc1]=TRUE&CQ\_RESULTS\_DOC\_TEXT=YES.</a> Internet. Accessed 18 April 2000.

- Members of the Combat Maneuver Training Center. "Operation MOUNTAIN EAGLE Lessons Stability Operations." News From the Front. Fort Leavenworth, KS: Center for Army Lessons Learned, March-April 1996, 1-9.
- "Military Intelligence Support." In <u>Task Force Hawk CAAT</u>: Operation ALLIED

  FORCE. Fort Leavenworth, KS: Center for Army Lessons Learned, January
  2000. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de call 8773.env?CQ SESSION KEY=TAQNRHDBBTDP&CQ CUR DOCUMENT=29&CQ SAVE[Show Doc1]=TRUE&CQ RESULTS DOCTEXT=YES. Internet. Accessed 18 April 2000.
- Perkins, David D. <u>HUMINT/CI</u>. Fort Leavenworth, KS: Center for Army Lessons Learned, November 1997. CALL Special Products Database. Available from <a href="http://call.army.mil/call/spc\_prod/humint/humint.htm">http://call.army.mil/call/spc\_prod/humint/humint.htm</a>. Internet. Accessed 1 September 1999.
- "Planning Considerations." In <u>Stabilization Force Planning Process</u>. Fort Leavenworth, KS: Center for Army Lessons Learned, January 1999. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de call 8773.env?CQ SESSION KEY=THIUSGCGZREJ&CQ CU R DOCUMENT=11&CQ SAVE[Show Doc1]=TRUE&CQ RESULTS DOCTEXT=YES. Internet. Accessed 26 October 1999.
- US Army Training and Doctrine Command. <u>Initial Impressions Report: Task Force Eagle Initial Operations, Operation Joint Endeavor</u>. Fort Leavenworth, KS: Center for Army Lessons Learned, May 1996.
- US Army Training and Doctrine Command. <u>B/H CAAT 2 Initial Impressions Report:</u>
  <u>Task Force Eagle Continuing Operations, Operation Joint Endeavor.</u> Fort
  Leavenworth, KS: Center for Army Lessons Learned, September 1996.
- US Army Europe, <u>Operation Joint Endeavor: USAREUR Headquarters After Action Report.</u> Heidelberg, GE: US Army Europe, May 1997.
- 18 Military Intelligence and Security Section, 1 MI Bn. <u>The Rat, ARRC Special</u>
  <u>Edition</u>. BFPO, United Kingdom: Headquarters, Allied Command Europe Rapid Reaction Corps, January 1996.

## INTERVIEWS AND DISCUSSIONS

- Blanchfield, Jody, Air Force officer and former Senior Director for JSTARS during Operation JOINT ENDEAVOR. Discussion with author, 27 April 2000. Written notes. Fort Leavenworth, Kansas.
- Gates, Brian, former Division Collection Manager for 1st Infantry Division. Discussions

- with author, March and April 2000. Written notes. Fort Leavenworth, Kansas.
- Glunz, Matt, former G2 Plans Officer, 10<sup>th</sup> Mountain Division. Interview by author, 27 April 2000. Telephone conversation. Leavenworth, Kansas.
- Hornung, Skyler, SFOR Planner for 3d Infantry Division. Bosnia trip overview. Discussion with author, 27 January 2000. Email exchange. Leavenworth, Kansas.
- Kope, John, former G2 Plans Officer for 1<sup>st</sup> Armor Division. Interview by author, 24 April 2000. Written notes. Leavenworth, Kansas.
- Menoher, Paul, former DSCINT. Interview by Dr. Richard Hunt, US Army Center of Military History, 3 February 1997. Written notes. Washington, DC. CALL Restricted Database. Available from <a href="http://160.149.150.44/cgi-bin/cqcgi/@de call 8773.env?CQ SESSION\_KEY=TAQNRHDBBTDP&CQ C UR DOCUMENT=51&CQ SAVE[Show\_Doc1]=TRUE&CQ RESULTS\_DOC TEXT=YES. Internet. Accessed 18 April 2000.</a>
- White, Jonathan, former Joint Commission Officer, Task Force Eagle. Discussions with author, 22 November 1999 and 27 April 2000. Email exchange and written notes. Fort Leavenworth, Kansas.

# UNPUBLISHED DISSERTATIONS, THESES, MONOGRAPHS, STANDING OPERATING PROCEDURES, BRIEFINGS, AND NOTES

- Analysis and Control Element (ACE), 101 Military Intelligence Battalion. Danger Forward: Concept of Intelligence Operations. VIP briefing on intelligence Architecture for Operation Joint Guard. 4 August 1998.
- Archer, Sarah, Registered Nurse with United Nations (UN) and Nongovernmental Organization (NGO) experience. "Civil-Military Operations Overview." Briefing to 3ID commanders and staff during its Decision Making Exercise (DME). Written notes. Fort Stewart, Georgia, 4 May 2000.
- Ash, L. "Wilderness Guide: Providing Intelligence for the Commander in Bosnia." Newport, RI: US Naval War College, March 1996. Microfiche.
- Bloechl, Timothy D. "Mission Complete?: Tactical Intelligence during the Transition From War to Peace." MMAS Monograph, Fort Leavenworth, KS: School of Advanced Military Studies, USACGSC, 1992.

- Dunlap, Charles J. "Future of War: A Perspective." Briefing to Advance Military Studies Program students, 10 May 2000. Written notes. Fort Leavenworth, Kansas.
- Gavle, Kathleen A. "Division Battle Staff Requirements for Sustained Peace Enforcement Operations." MMAS Monograph, Fort Leavenworth, KS: School of Advanced Military Studies, USACGSC, 1999.
- Hughes, Patrick, former Director, Defense Intelligence Agency. Briefing to Advanced Military Studies Program students, 14 April 2000. Written notes. Fort Leavenworth, Kansas.
- Hunter, Jonathan B. "The Doctrinal Functions of Intelligence: Are They Applicable to Peacekeeping and Peace Enforcement Operations?" MMAS Monograph, Fort Leavenworth, KS: School of Advanced Military Studies, USACGSC, 1993.
- <u>Joint Military Commission Policies, Procedures, and Command Guidance Handbook</u>, 2<sup>nd</sup> ed. Tuzla, Bosnia: Task Force Eagle Joint Military Commission, 12 May 1996.
- <u>Joint Military Commission Policies, Procedures, and Command Guidance Handbook,</u> 3<sup>rd</sup> ed. Tuzla, Bosnia: Task Force Eagle Joint Military Commission, 20 October 1996.
- Joint Military Commission Policies, Procedures, and Command Guidance Handbook, 5<sup>th</sup> ed. Tuzla, Bosnia: Multinational Division (North) Joint Military Commission, 9 July 1997.
- <u>Joint Military Commission Policies, Procedures, and Command Guidance Handbook</u>, 6th ed. Tuzla, Bosnia: Multinational Division (North) Joint Military Commission, 12 January 1998.
- Matteson, Wallace, former Chief, Joint Military Commission (JMC) for 1<sup>st</sup> Infantry Division and 10<sup>th</sup> Mountain Division. "Joint Military Commission." Briefing to 3ID commanders and staff during its Decision Making Exercise (DME). Written notes. Fort Stewart, Georgia, 3 May 2000.
- Morrison, Douglas J. "Tactical Reconnaissance in Peace Operations: Implications for the Future." MMAS Monograph, Fort Leavenworth, KS: School of Advanced Military Studies, USACGSC, 1993.
- Phillips, Kathleen A. "Army Tactical Electronic Intelligence in Asia: Support of Combat Operations Since World War II." Masters Thesis, Bolling Air Force Base, VA: Defense Intelligence College, Postgraduate Intelligence Program, 1992.

- Phillips, Kathleen A. "Bosnia-Herzegovina Country Overview." Briefing presented and modified for Individual Replacement Training at the Combat Maneuver Training Center, Hohenfels, Germany, 1996-1998.
- Puls, Keith, former SJA for 10<sup>th</sup> Mountain Division. "Legal Aspects of Operations in Bosnia." Briefing to 3ID commanders and staff during its Decision Making Exercise (DME). Written notes. Fort Stewart, Georgia, 1 May 2000.
- Rapp, Jeffrey. "Intelligence Requirements for Military Operations Other Than War."
  US Army War College Strategy Research Project. Carlisle Barracks, PA: US
  Army War College Strategic Studies Institute, 1998. Microfiche.
- Schifferle, Peter. "Division Battle Staff." Briefing to AMSP class. Author's notes. Fort Leavenworth, Kansas, August 1999.
- Schifferle, Peter. "Military Decision Making Process." Briefing to AMSP class. Author's notes. Fort Leavenworth, Kansas, September 1999.
- "Task Force Eagle Mission Briefing, November 26, 1996." Slide packet provided to author by Stanley F. Cherrie. Fort Leavenworth, Kansas, 25 October 1999.
- <u>USAREUR 40104X Campaign Plan, Newcomers' Orientation</u>. Briefing to the new team. 10 November 1995. On Planners' Toolbox. CD-ROM. Fort Leavenworth, KS: AMSP, Summer 1999.
- Wood, Bob. "What They Never Told You at Fort Leavenworth about PSO." Slide packet compiled by BG Bob Wood, former Assistant Division Commander, 1st Armor Division, provided to author by Stanley F. Cherrie. Fort Leavenworth, Kansas, 25 October 1999.

#### **BOOKS**

- Durch, William J., ed. <u>UN Peacekeeping, American Policy, and the Uncivil Wars of the 1990s</u>. New York: St. Martin's Press, 1996.
- Glass, Robert G. and Phillip B. Davidson. <u>Intelligence is for the Commander</u>. Harrisburg, PA: Military Services Publishing Company, 1948.
- Higham, Matthew T., Michael N. Mercurio, and Steven W. Ghezzi, eds. <u>The ACCESS</u>
  <u>Issue Packet on Bosnia-Herzegovina</u>. Washington, DC: ACCESS, 1996.
- Holbrooke, Richard. To End a War. New York: Random House, 1998.
- Johnsen, William T. <u>US Participation in IFOR: A Marathon, Not a Sprint</u>. Carlisle Barracks, PA: Strategic Studies Institute, 1996.

- Johnson, Douglas V., ed. <u>Warriors in Peace Operations</u>. Carlisle Barracks, PA: Strategic Studies Institute, 1999.
- Koch, Oscar W. and Robert G. Hays. <u>G2: Intelligence for Patton</u>. Philadelphia, PA: Army Times Publishing Company, distributed by Whitmore Publishing Company, 1971.
- Malcolm, Noel. <u>Bosnia: A Short History</u>, new, updated ed. New York: New York University Press, 1996.
- Owen, David. Balkan Odyssey. New York: Harcourt Brace & Company, 1995.
- Quinn, Dennis J., ed. <u>Peace Support Operations and the US Military</u>. Washington, DC: National Defense University Press, 1994.
- Silber, Laura and Allan Little. <u>Yugoslavia</u>: <u>Death of a Nation</u>, revised and updated ed. New York: Penguin Books, 1997.
- Wentz, Larry, ed. Lessons from Bosnia: <u>The IFOR Experience</u>. Washington, DC: National Strategic Studies Institute, 1997.
- Woodward, Susan L. <u>Balkan Tragedy: Chaos and Dissolution After the Cold War</u>. Washington, DC: The Brookings Institution, 1995.
- Zimmermann, Warren. Origins of a Catastrophe. New York: Times Books, 1996.

## ARTICLES AND INTERNET FACT SHEETS

- Abraham, Arnold. "The National Intelligence Support Team in Somalia." <u>Marine Corps Gazette</u> 82, no. 4 (April 1998): 29.
- Agee, Collin A. "Joint STARS in Bosnia: Too Much Data, Too Little Intel?" Military Intelligence 22, no.4 (October-December 1996): 6-10, 40-41.
- Baker, Kristin M. "Operation JOINT ENDEAVOR: Joint STARS in the Balkans." <u>Military Intelligence</u> 22, no.4 (October-December 1996): 27-29.
- Boll, Kenneth H., Jeffrey S. Holachek, and Jennifer A. Ellington. "Victory in Egypt: 3<sup>rd</sup> ID (M) DISE." <u>Military Intelligence</u> 22, no. 4 (October-December 1996): 34-36.
- Bowen, Wyn. "Open-Source Intel: A Valuable National Security Resource." <u>Jane's Intelligence Review</u> 11, no. 11 (November 1999): 50-54.

- Bunker, Robert J. "Rethinking OOTW." Military Review 75, no. 6 (November-December 1995): 35-41.
- Cherrie, Stanley F. "TF Eagle." Military Review 77, no. 4 (July-August 1997): 63-72.
- Cirafici, John L. "SFOR in Bosnia in 1997: A Watershed Year." Parameters 29, no. 1 (Spring 1999): 80-91.
- Daneker, Annmarie. "502<sup>nd</sup> Military Intelligence Company Leaves Task Force." Talon 04, no. 29 (July 1998) Document on-line. Available from http://www.tfeagle.army.mil/talon/jul10/story1.html. Internet. Accessed 18 April 2000.
- DeFrietas, John. "Eyes of the Eagle: 101st Airborne Division (AASLT) DISE." Military Intelligence 22, no. 4 (October-December 1996): 32-33.
- Eichelberger, Charles B. "The MI Corps: Vision of the Future." <u>Military Intelligence</u> 17, no.4 (October-December 1991): 7-8.
- Evans, Ernest H. "The US Military and UN Peace Operations." Marine Corps Gazette 81, no.4 (April 1997): 49-52.
- Federation of American Scientists. "303<sup>rd</sup> Military Intelligence Battalion (Operations)."

  Document on-line. Available from
  <a href="http://www.fas.org/irp/agency/army/forscom/iii\_corps/504\_mi\_bde/index.htm">http://www.fas.org/irp/agency/army/forscom/iii\_corps/504\_mi\_bde/index.htm</a>.

  Internet. Accessed 25 April 2000.
- Federation of American Scientists. "319th Military Intelligence Battalion (Operations)."

  Document on-line. Available from

  <a href="http://www.fas.org/irp/agency/army/forscom/xvii\_corps/525\_mi\_bde/319\_mi\_bn/index.html">http://www.fas.org/irp/agency/army/forscom/xvii\_corps/525\_mi\_bde/319\_mi\_bn/index.html</a>. Internet. Accessed 25 April 2000.
- Gramer, George K, Jr. "Operation JOINT ENDEAVOR: Combined-Joint Intelligence in Peace Enforcement Operations." Military Intelligence Professional Bulletin 22, no. 4 (October-December 1996): 11-14.
- Grange, David L, and John S. Rovegno. "Setting the Stage: Peacekeeping Operations Demand Unconventional Military Approaches." <u>Armed Forces Journal International</u> (March 1998): 44-45.
- Gavle, Kathleen A. "Mission Rehearsal at CMTC: Operations Joint Endeavor and Joint Guard." Military Intelligence 24, no.2 (April-June 1998): 33-37.
- Hallagan, Robert E. "An Introduction to our Intelligence Branch Operational Concept." Military Intelligence 19 (January-March 1993): 6-15.
- "History of the NATO-led Stabilisation Force (SFOR) in Bosnia and Herzegovina." 16 November 1998. Document on-line. Available from

- http://www.nato.int/sfor/docu/d981116a.htm. Internet. Accessed 12 September 1999.
- Hunt, John B. "OOTW: A Concept in Flux." Military Review 76, no. 5 (September-October 1996): 3-9.
- Lange, David A. "The Role of the Political Advisor in Peacekeeping Operations." Parameters 29, no. 1 (Spring 1999): 92-109.
- Lum, Zachary. "Balkan Eyes: Airborne Recon over Bosnia." <u>Journal of Electronic</u> <u>Defense</u> 18, no. 11 (November 1995): 52-57.
- Lum, Zachary. "The Measure of MASINT." <u>Journal of Electronic Defense</u> 21, no. 8 (August 1998): 443-48.
- MacFarland, Sean B. "A Framework for Peace Operations." <u>Armor</u> 106, no. 1 (January-February 1997): 29-31.
- Manwaring, Max G. "Peace and Stability Lessons from Bosnia." <u>Parameters</u> 28, no. 4 (Winter 1998-1999): 28-38.
- McNeely, Jack. "New Ground Surveillance System Being Tested by MI Battalion." Talon 04, no. 35 (August 1998) Document on-line. Available from <a href="http://www.tfeagle.army.mil/talon/21August98/story1.html">http://www.tfeagle.army.mil/talon/21August98/story1.html</a>. Internet. Accessed 18 April 2000.
- Media Relations Division. "Rotation Plan: Bosnia." Press Release 99-100.

  Washington, DC: Office of the Chief of Public Affairs, 26 October 1999.

  Document on-line. Available from

  <a href="http://www.dtic.mil/armylink/news/Oct1999/r19991026sfor.html">http://www.dtic.mil/armylink/news/Oct1999/r19991026sfor.html</a>. Internet.

  Accessed 12 April 2000.
- Nash, William L. "The Year of Living Creatively." <u>Armed Forces Journal International</u> (November 1997): 38-43.
- Proctor, Jerry V. "CI/HUMINT Automation—Step One." <u>Military Intelligence</u> 24, no. 3 (July-September 1998): 60.
- Roos, John G. "Two More Calls for Overhauling the US Intelligence Community." <u>Armed Forces Journal International</u> 135, no. 7 (February 1998): 20.
- Rota, Dane L. "Combat Decisionmaking in Operations Other Than War." Military Review 76, no. 2 (March-April 1996): 24-28.
- Shortsleeve, Brian J. "Realtime Imagery for Ground Commanders in Bosnia." Marine Corps Gazette 82, no. 4 (April 1998): 34-35.

"1999 Weapons and Equipment Directory." Army (October 1999): 260-294.